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THE EPHEBIC OATH

I WILL NOT BRING DISHONOR UPON MY ARMS, AND I WILL NOT DESERT THE COMRADE BY MY SIDE. I WILL DEFEND THE SACRED PLACES AND ALL THINGS HOLY, WHETHER ALONE OR WITH THE HELP OF MANY. I WILL LEAVE MY NATIVE LAND NOT LESS, BUT GREATER AND BETTER, THAN I FOUND IT. I WILL RENDER INTELLIGENT OBEDIENCE TO MY SUPERIORS, AND WILL OBEY THE ESTABLISHED ORDINANCES AND WHATSOEVER OTHER LAWS THE PEOPLE SHALL HARMONIOUSLY ESTABLISH. I WILL NOT SUFFER THE LAWS TO BE SET ASIDE OR DISOBEYED, BUT WILL DEFEND THEM ALONE OR WITH THE HELP OF ALL. AND I WILL RESPECT THE MEMORY OF THE FATHERS. THE GODS BE MY WITNESSES

The young men of Athens took this oath to the Commonwealth at the beginning of their second year of military service

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ELEMENTARY ECONOMICS

BY

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INTRODUCTION

There never was a time when men needed to think so seriously about the problems of national welfare as the present. It is plainer than ever that this is an economic question, that is, a question of economizing. It is the purpose of this book to examine the economic foundations of our national welfare and to point out some of the simpler and more direct methods of strengthening these foundations, to the end that our nation and all nations that aim at democracy and justice may prosper more and more.

In order that there may be real improvement our people must themselves understand the principles upon which national prosperity rests. People who do not govern themselves, but rely upon rulers to govern them, may ignore these questions; but people who rule themselves have no one to depend upon but themselves. They must therefore know for themselves the leading principles of this great subject.

The time to begin studying this subject in a systematic manner is when we first begin to think about public questions—that is, in early youth, for our youth are thinking about public questions and we could not stop them even if we wanted to. Much time is lost and much loose thinking results from postponing this study too long. Opinions are formed too hastily and with too little information, and when once formed they are hard to get rid of. No study can possibly be more important than that which will even slightly reduce the number of hasty and ill-founded opinions and train our future citizens in the habit of careful, painstaking study of public questions and of looking on many sides of each one before reaching a conclusion concerning it.

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ELEMENTARY ECONOMICS

PART ONE. WHAT MAKES A NATION PROSPEROUS

- **Economics, or the Problems of Getting and Utilizing**
  - Private economics (the word "economics" is derived from the Greek *οἶκος*, "house," and *νέμω*, "manage"
    - Getting private income: Business economics
    - Utilizing private income: Home economics
  - Public economics, or political economy
    - Finance (the government's business)
      - Getting government income
        - Taxation
        - Royalties
        - Public domain
        - Public business
      - Utilizing government income
        - Budget making
        - Expenditure
    - Social economy (promoting the prosperity of the people)
      - Getting social income
        - Production of wealth
        - Exchange of goods
        - Distribution of products
      - Utilizing social income: Consumption of wealth

CHAPTER I

WHAT MAKES A NATION PROSPEROUS

Production and economy the basis of prosperity. A nation prospers on what it produces. It can continue to prosper only so long and in so far as it continues to produce, year in and year out, century after century and millennium after millennium. Production, however, is not enough,—the nation must also economize. In fact, production itself is a form of economy.

However much the nation produces, it prospers only in so far as it continues to produce, year by year, more than it consumes and wears out. When every year sees something added to the stock of durable goods, something additional produced for future years, there is an expansion and an accumulation of wealth; in short, there is prosperity. If at any time a nation begins consuming in a year all that it produces that year, the accumulations of the past quickly deteriorate and disappear, prosperity is gone, and poverty lies ahead.

Two primary factors in production. How much a nation can produce will depend primarily upon two things: first, upon its geographical situation, that is, upon how rich its land is in plant food, minerals, forests and power, how favorable its climate is, and how well it is situated for trade and transportation; second, upon its people, that is, upon how energetic and how wise they are in making use of their natural resources.

A nation's geographical situation is not easily changed; but the habits of the people may be changed, and these are even more important than the geographical situation. By reason of their energy and wisdom, nations have grown rich and great in the midst of very poor geographical surroundings. Others have grown poor in the midst of rich surroundings by reason of their lack of energy or their unwisdom. A nation can therefore control the factor

upon which its prosperity most depends; which means that it can, in most cases, be as prosperous as it deserves to be, or that it must blame itself and not its geography if it does not prosper.

How to secure a full and wise use of the national energy, where millions of individual wills have to be persuaded and wisely directed, is one of the greatest and most important of all questions. The working energy of, say, a hundred million people is tremendous, but the opportunities for waste are also tremendous. Upon the wise utilization, on the one hand, or the waste, on the other, of that vast fund of energy hangs the question of the prosperity or the poverty of the nation.

Hard work is, of course, necessary, but mere hard work is not enough. The work must be wisely directed. This requires a vast fund of knowledge—scientific, political, and administrative. It also requires organization, in order that each individual may do that for which he is best fitted and also in order that different individuals may work with, rather than against, one another.

Importance of economy. The word "economy," in its widest sense, includes the using of all the energy of the people and the wise direction of that energy. For any person to be lazy or idle is a waste of that person's energy and is therefore uneconomical. To direct that energy unwisely is to waste it in another way and is also uneconomical. Both forms of waste prevent the highest prosperity of the nation.

What it means to economize. In its simplest possible sense, to economize is to choose among several different things that one would like to have, giving up the less important in order to have the more important. This choosing takes on many forms. One may have to choose between play and work, between different kinds of work or different kinds of play, or between different objects which one might get for one's work or one's money.

When you are asked to do a certain thing and you say that you have not time, you may be saying in a more polite way that there is something else which you consider more important than the thing you are asked to do. You are compelled to economize your time, since you have not time enough to do everything. You

must leave many things undone, and it is necessary, therefore, that you choose very carefully the few things which you think it most important that you should do with your limited time and energy. Similarly, when you say that you cannot afford a certain thing, you frequently mean that there are other things for which you think it more important that you spend your money. Not having money enough to buy everything, you must choose very carefully and try to get the few things which will be worth most to you in the long run. To do otherwise either with your time or your money would be to fail to achieve the largest prosperity or well-being. This is as true of a nation as of an individual.

Why we have to economize. When you say that you do not have time to do a certain thing or that you cannot afford to buy a certain object, you are stating two of the fundamental facts of life: first, the ever-present fact of scarcity; second, that you are an economic being, capable of recognizing the fact of scarcity and of guiding yourself accordingly. It is the fact of scarcity that makes it necessary for us to economize, and it is our wisdom that enables us to meet the situation and conform our lives to it. The fact that our time and energy are scarce or insufficient to enable us to do everything that we should like to do makes it certain that we cannot produce or earn everything that we should like to have. Besides, if we were to work all the time we should have no time to play; and everybody likes to play—that is, everybody worth mentioning. One of our many problems of economy is therefore that of choosing whether to deprive ourselves of the opportunity to play in order to get certain goods that we want, or to do without the goods in order to have time to play as much as we should like.

At every step in the life of every normal person he is confronted with some problem of economy, and the necessity for economy grows out of the scarcity of something or other. We never think of economizing things that are sufficiently abundant to satisfy everybody, such as air, sunlight, water in many places, wood, stone, or sand in others. Let any of these things become scarce, however, and we must begin to economize them.

It happens that in the spots where most of us live many desirable objects are scarce. These objects must be increased—and that requires an economical use of our time and energy—or they must be economized and made to go as far as possible in the satisfaction of our wants. Show me a person who experiences no lack or scarcity of anything and I will show you a person who has no need for economy; but you will look a long time before you find him. Show me a creature who does not appreciate the fact of scarcity and I will show you a creature who does not know enough to economize, however much he may need to.

Getting and utilizing. In the practical everyday life of the average person of the present, the problems of economy come mainly under the heads of getting and utilizing, of income and expenditure, or of business and household management. A person's common experience of scarcity takes the form of an income which will not buy all the things he desires or, which means the same thing, of desires which run beyond his income.

Three ways of economizing. One must, therefore, because of scarcity, economize, first, by using his time and energy to better advantage in order to get a larger income; second, by spending his income as wisely as possible so as to buy the things he needs most; third, by economizing the goods purchased so as to make them go as far as they will. Most men have to economize in all these ways. The greater part of the time and attention of all civilized men is spent on these matters of economy, which is one reason why the study of economics is the most important of all studies. Whether they prosper or not depends upon how well they solve these problems.

A glance at the diagram at the beginning of this chapter will give one a general view of all the forms in which the problems of getting and utilizing present themselves. This also gives in outline the leading branches of the great science of economics, which has to do with the problems of getting and utilizing things that are scarce. It has nothing to do with things that are not scarce and therefore do not have to be economized. When a thing is scarce, it leaves some of our wants unsatisfied. If we can produce

or economize it, it leaves fewer wants unsatisfied and leaves us better off. That is the way we increase our prosperity.

Production, itself, is a form of economy. It requires, first, that we utilize our working power and not let it lie idle; second, that we utilize it wisely, doing the most important things and leaving the less important things undone; third, that we do what we undertake in the most efficient way, with the least waste of effort. After goods are produced, their wise use is another form of economy. Economy, in this wide sense, is the basis of all prosperity.

EXERCISES

1. What are the two principal things upon which the prosperity of a nation depends? Which is the more important? Why?
2. Why is economy so important?
3. What does it mean to economize?
4. Why do we have to economize?
5. In what three ways does the average man economize?
6. Why is it more important that we give attention to things that are scarce than to things that are sufficient?

CHAPTER II

WEALTH AND WELL-BEING

Prosperity and wealth. The study of national prosperity must necessarily lead to a study of such things as wealth and well-being. Prosperity consists in getting an adequate supply of those things called wealth and in utilizing them wisely. When we have secured an adequate supply of those things we have the means of well-being. When we have utilized them wisely we have achieved well-being. The material objects which we try to get and to utilize are called *wealth*.

What are economic goods? Before we can go very far in our study of getting and utilizing, or of production and consumption, we must get a clear idea of the sort of things that men try to produce or to get. When it was stated in the last chapter that the necessity for economy arose out of the fact of scarcity, it might have been guessed at once that scarcity has a great deal to do with our concept of wealth and with our efforts to produce it. At any rate the only things we try to produce are the things of which we do not have enough. These are the things about which we are anxious. The very first step toward a true understanding of the nature of wealth, then, is a clear perception that wealth, in the economic sense, consists of things that are scarce and therefore need to be economized. Some very useful things are very abundant, however,—so abundant that everyone can have all he wants. Such things do not have to be economized, hence they are not economic goods. Only those things are economic goods which have to be economized; that is, which are scarce.

Two meanings of wealth. Now the word "wealth" has two meanings. In the first place, it is the collective name for all economic goods, or for all goods that have to be economized; that

is, for goods that are scarce. In the second place, it is the name of a condition or state of being. It comes from the older word "weal," which means very much the same as "well-being." These two meanings, while apparently different, are yet very closely related. The condition of well-being which we call wealth in the latter sense depends upon the possession of an adequate supply of those things which we call wealth in the former sense; that is, of the things which are ordinarily scarce. He who lacks an adequate supply of these things is poor, though of air, sunshine, and other things which are not scarce he has as much as anybody. He who possesses an adequate supply of scarce things is wealthy, or in a state of wealth. In short, those economic goods called wealth are the goods upon which weal, or well-being, depends. Well-being is increased when these goods are increased or economized; well-being is decreased when these goods are decreased or wasted.

How well-being depends upon wealth. It could not be said of anything which is not scarce that our well-being increases when we have more of it and decreases when we have less of it. There is such an abundance of air, for example, under ordinary circumstances, that no one would be any better off than he is now if the supply of air could be increased, nor would anyone be any worse off if the supply of air were slightly decreased. In other words, no one's well-being depends upon *more* air, even if it could be produced. If, however, air were so scarce that there was not enough to go around, then not only would it need to be economized very carefully but there would be some advantage in producing more of it, if that could be done. The weal, or well-being, of mankind would be improved in proportion as more air could be produced; mankind would be injured in proportion as air was wasted or destroyed. While, therefore, we can say that air is a necessity in a certain absolute sense, yet in a practical economic sense we cannot say that anyone would be better off if more air were produced or if it were even wisely economized; nor can we say that anyone would be worse off if a little air were destroyed or wasted. There would still be

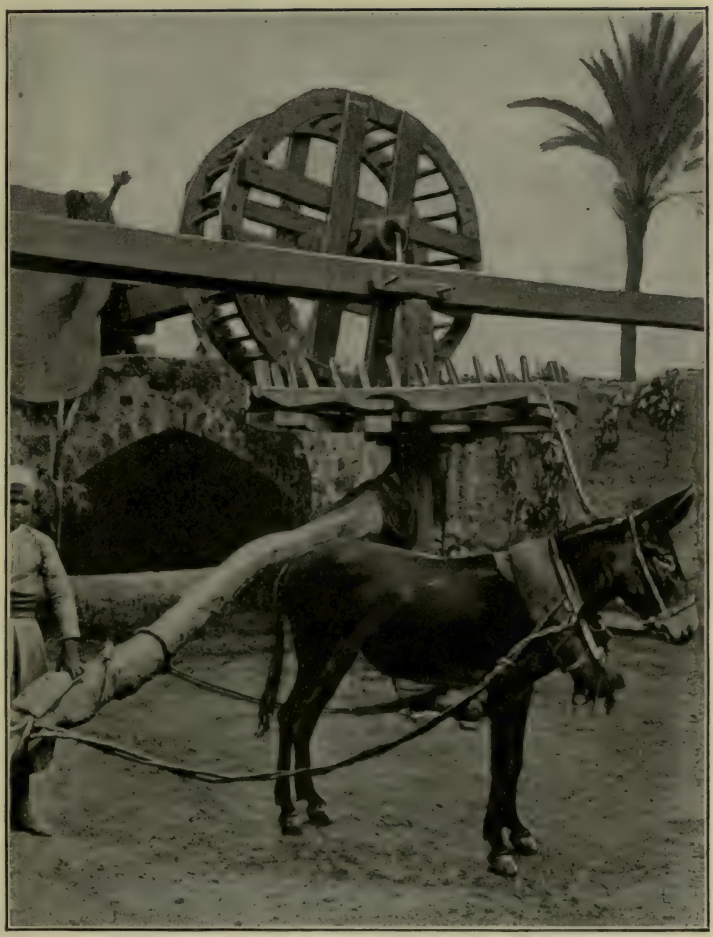
enough to satisfy everybody. That is why air, though an absolute necessity, is not an economic good.

The question of having more or having less. Water is another illustration; perhaps a better one, because there are many places where water is so abundant that it does not have to be economized at all and other places, such as the arid West, where it is so scarce that it has to be economized very carefully. In the former places water is not wealth; in the latter it is. In the former no one labors to secure any more; in the latter they do. In the former no one would be better off if there were more water; in the latter some people would be better off. In the former well-being does not depend upon a little more or a little less water; in the latter it does. In the former there is no occasion for economizing water; in the latter it is very important that it be economized and made to go as far as possible. In the former the formula "more water, greater well-being; less water, less well-being" is not true; in the latter it is true. This is the test in every time and place as to whether water is wealth or not. All that has been said of water may be said of anything else. The same test must be applied to determine whether it is wealth or not.

In the diagram given below is a classification of all tangible objects with which it would be possible for man to concern himself.

TANGIBLE OBJECTS
- Objects of repugnance ("Illth")
  - Things harmful to man
  - Things useful but too abundant
- Objects of indifference
  - Things useless but not harmful
  - Things useful but sufficient in quantity
- Objects of desire (Wealth): Things useful *and* scarce

Those which are harmful to him he must try to destroy. Toward those which are useless without being in the way or being otherwise harmful he is indifferent. Those which are useful to him, called goods, concern him most. Of these, some are too abundant at certain times and places. In such times and places his attitude toward them must be very much the same as that toward those which are positively harmful. Yet when they exist in smaller quantities—that is, in quantities less than he needs—



WHERE WATER IS WEALTH

he will strive as hard to get more as he will strive to reduce the supply when they are too abundant. Water in swampy land is an example of overabundance; in desert land, of underabundance. Manure in a city livery stable is an equally good example of overabundance; in a sterile field, of underabundance.

Relation of value to economic goods. We have gone to considerable pains to point out that one characteristic of economic goods is that they are always scarce. It is this which gives them the power to induce men to work and to economize. Another characteristic is that they all have value, or power in exchange. The power to command other desirable things in peaceful and voluntary exchange—that is, value—is very much the same as the power to induce men to work. That is to say, the thing which possesses one kind of power will always possess the other, if, indeed, it be not incorrect to speak of them as different kinds of power. The object which possesses this power to appeal to human motives in such a way as to induce men either to give up some desirable object in exchange for it or to labor in order to produce it is always said to be valuable. This power depends in all cases upon the scarcity or insufficiency of the existing supply of the object in question.

These things, again, are economic goods, or wealth. Since, as we have just shown, they all possess value, it amounts to the same thing to say that wealth consists of things that have value. In short, such words as "wealth," "value," "economic goods," and "economy" all center around the one great fact of scarcity,—the insufficiency of certain things at certain times and places to satisfy desires. Out of this great fact grow also such ideas as property, industry, and foresight. No one wants to secure property rights, for example, in anything of which everybody has enough. But when anyone fears that there may not be enough of a certain thing to go around, and that he may, therefore, be left out, he naturally wants to guard against that calamity by getting possession of a supply. He will try to get possession of a supply either by producing it himself or by buying it of someone else, and he will try to guard his treasure carefully. When the state steps in and undertakes to protect him in his possession, he

has then secured a property right in the thing in question. Again, productive industry, as already shown, is directed toward lessening scarcity, or increasing the supply of something whose supply would otherwise be insufficient. Frugality and foresight are exercised to provide against further scarcity.

Meaning of scarcity. A thing is scarce when there is not as much as people want. A thing may be rare without being scarce and scarce without being rare. Flies are rare in winter time in cold countries, but they cannot properly be said to be scarce because no one wants any more. Grass cannot be said to be rare in summer time, but if there is not enough for the farmer's cattle, the farmer at least will want more. In that sense grass is scarce, even in summer.

Scarcity a matter of time and place. A thing is scarce, if at all, in some definite time and place. No matter how much water there may be in the Mississippi River, it does not alter the fact that water is scarce a few hundred miles to the westward; no matter how much copper there may be in the bowels of the earth, it does not alter the fact that there is less copper in available form than is needed on the surface. It is this fact which induces men to labor to move things from one place to another.

Before proceeding farther it is necessary to make one important qualification—men do not always know what they really need or upon what their well-being depends. If they are mistaken on any phase of this question, they will be placing a high value upon some things that are not good for them and a low value or no value at all upon some things that are good for them. They are poor economizers who do this, but there are many poor economizers in the world. If they *think* they need more than they have, they will strive to get more, either by offering something for it, thus giving it a market value, or by trying to produce it, thus creating an industry. This explains why it is that the student of economics is sometimes compelled to include among economic goods, or wealth, articles which he himself would not use or which he regards as harmful, such as opium, alcoholic drinks, or tobacco.

Importance of desiring the right things. It sometimes happens that men desire things which they do not need and need things which they do not desire. In such cases they will try to get or produce what they desire rather than what they need. The industries will be organized to produce the things which the people desire. If they desire opium or vodka they will produce these things rather than things that will do them more good. In such cases the more efficient their system of production becomes the more harm they will do themselves; and an efficient industrial system promotes national deterioration rather than national well-being. If one were to make a study of the wreckage of nations, one would probably find that more had decayed because their wants were wrong than because they were not able to supply their wants. Teaching or persuading people to want the right things has commonly been regarded as the work of the educator and the preacher, but no one who really has at heart the welfare of the people can be indifferent to the quality of their wants or desires.

Necessity of economizing means of production. Thus far in discussing the necessity for economy we have been considering the means of satisfying our wants directly. But we must also consider the necessity of economizing the indirect means of satisfying wants. In the effort to produce goods to satisfy our wants it is necessary to make use of various factors of production, such as labor, tools, raw materials, etc. These do not themselves satisfy our wants, but they enable us to produce things that do satisfy. They also are scarce and have to be economized.

To be sure, many things that are essential to production are not scarce. These are not considered as factors of production; that is, they are not *economic* factors of production at all. Carbon dioxide is just as essential to the growing of plants as nitrogen, phosphorus, or potash, but there is plenty of carbon dioxide in the air; whereas, in most soils, nitrogen, phosphorus, and potash are scarce or tending to become scarce. Therefore these three substances are considered as factors—that is, economic factors—in plant growth. Applying the same formula here as we did to

other things earlier in this discussion, the average farmer can say, and say truly, "More nitrogen, more plant growth; less nitrogen, less plant growth." Therefore agricultural production is increased by increasing the nitrogen in the soil. The same may be said of phosphorus and potash, but the formula does not apply to carbon dioxide. This is a principle of the very greatest importance, as will be seen later. Some of the greatest problems in economics and social justice depend upon this formula and are incapable of solution without it.

Why a thing has value. The fact that desirability and scarcity, and these alone, give value to a thing is perhaps clearly enough established by this time. Few will care to question the statement that not only must men desire a thing but they must desire more than they have before they will strive to get more either by purchasing it or by producing it. Moreover, this is as true of a factor used in production, such as tools, as of an article of direct consumption, such as bread. It may not be quite so obvious, but it is none the less true, that this is also one of the great sources of that conflict of human interests which gives rise to most of our problems of justice and equity.

EXERCISES

1. What are economic goods?

2. In what two senses is the word "wealth" used?

3. In what sense does well-being depend upon economic goods as distinguished from things that are abundant enough to satisfy everybody?

4. Of what class of goods can you say that you are better off as you get more of them and worse off if you have less of them? Can you say this of air? of water? If so, under what conditions?

5. What goods have value? Why?

6. What do you mean by scarcity? Is it the same as rarity?

7. What is a factor of production? Is labor a factor of production? Is land a factor of production? Could your neighborhood produce more goods if it had more land? Are tools, machines, and buildings factors of production? Could your neighborhood produce more goods if it had more tools, machines, and buildings?

CHAPTER III

THE GEOGRAPHICAL SITUATION

It was stated near the beginning of Chapter I that a people must generally blame itself rather than its geographical situation if it does not prosper. The human factor is more important than the geographical factor in determining national prosperity. Nevertheless the geographical factor is not to be ignored. However gifted, energetic, and farsighted a race may be, it will find it easier to expand and become prosperous in a rich than in a sterile country. In view, however, of the wonderfully rich territory occupied by the American people, it is obvious that they cannot excuse themselves on the ground of limited resources if they do not become as prosperous and as great a people as they would like to be. Their prosperity, power, and greatness are limited mainly by their own energy, wisdom, and virtue rather than by their environment.

What is a favorable geographical situation? It is easy to overemphasize the bodily comfort of living in a warm as opposed to a hot or cold climate and to ignore the bracing effects of changeable weather. It is also easy to overemphasize the tremendous productivity of certain tropical regions and to forget that they produce the enemies as well as the friends of man in great profusion. It is equally easy to go too far in the opposite direction and to hold that hard conditions, such as a harsh climate and a sterile soil, are best for man's development. If hard conditions are all that men need, the Eskimos of the Far North are peculiarly blessed.

If we take everything into consideration, it is probable that the temperate zones are most favorable to man's development as well as to his prosperity. He has here fewer unconquerable enemies

than in the tropics or in the frigid zones. He finds a wider variety of useful materials, such as grass, timber, and minerals, and he finds them in greater abundance here than elsewhere. Here the advantages to be gained by work are more obvious and more easily comprehended by the average intellect than anywhere else. The intelligence required to see the advantage of building shelters, making clothing, and kindling fires, especially in a place where, along with the cold weather, there is an abundance of suitable material, is not very great. It requires much more scientific knowledge to enable men to guard against the hookworm and the various harmful bacteria which infest the tropics. These, together with venomous insects and reptiles, not to mention the larger beasts of prey, imperil the lives of the dwellers in the tropics quite as much as our cold winters imperil the lives of dwellers in these northern latitudes.

Northern-grown crops are generally best. It is a fact of observation, however we may account for it, that many of our farm crops reach their highest perfection very near the northern limits of the areas within which they can be grown without injury from the frost. The Cotton Belt of this country, though confined to the Southern states, is in reality near the northern limit for cotton. Our Corn Belt is likewise near the northern limit for corn. The oranges of California and Florida also are grown near the line where frost will destroy the crop. The potato and the sugar beet do better either in high altitudes or high latitudes, where the summers are barely warm enough and the seasons barely long enough to mature the crop.

One explanation of this general rule is that by migrating northward a plant escapes many of its ancient and hereditary enemies. When seed corn is saved, dried, and protected during the winter, and special care given it during the growing-season, it can grow farther north than would be possible if it had to shift for itself. Its natural enemies in its original home, not having man's help, cannot live over winter or mature between frosts in our Corn Belt. Therefore the corn plant escapes some of its worst enemies. The same is true of the cotton plant (though some of its ancient

enemies seem to be following it northward) and also of other plants which seem to flourish under cultivation in latitudes where they could not survive without help. This is an important factor in enabling large numbers of men to produce an adequate food supply in northern latitudes.

Similarly, when man learns to keep himself warm by building houses, manufacturing clothing, and making fires, he can live in latitudes which enable him to escape some of his ancient and hereditary enemies, such as the hookworm and the germs of yellow fever, malaria, etc. The northern limit of his best development, however, must coincide with the northern limits of the production of abundant means of satisfying his many desires. Another advantage of growing food crops as far north as the seasons will permit is that during the growing-season for plants —that is, during the summer—the days are longer in high than in low latitudes. This gives plants more light while they are growing. The proportion of sugar in sugar beets, for example, seems to depend partly upon the amount of sunlight which they get while they are growing.

Buckle's generalizations. In his famous work, "The History of Civilization in England," Henry Thomas Buckle makes a great deal of several other factors in the geographical situation besides those already mentioned. These he groups under four heads; namely, climate, food, soil, and the general aspect of nature. He goes to the extreme of attributing to these factors a controlling influence, not only on the economic prosperity of the people but even on their intellectual, moral, and religious development as well. Without following him to these extremes, we may profitably give attention to some of his observations regarding the influence exercised by these factors on the industrial development of a people. No one is likely to deny that the presence of cheap coal has had a great deal to do with the economic development of Europe and America, or that the former abundance of timber in this country had a great deal to do with the kind of houses we built and are still building. A shingled roof, for example, is unknown except in countries where timber has been abundant.

That ancient civilizations arose in regions where labor applied to land was highly productive is a commonplace in history. The fertile river valleys of Egypt, Mesopotamia, India, and China supported civilizations when our European ancestors were still savages. Here food was so abundant that men had time to do other things besides satisfying their immediate daily needs; or, rather, a part of the population could produce food enough to support the rest while the latter gave their time to other things. The civilizations which have since grown up in latitudes farther north may not have exceeded those earlier civilizations in physical magnificence, but they have exceeded them in all that makes for the comfort and well-being of the average man.

On the other hand, the overpowering influence of the terrific productiveness of nature in certain tropical regions is sufficient to discourage man's enterprise. Kipling's story entitled "Letting in the Jungle"[1] gives a vivid picture of the way in which the jungle struggles to reassert itself,—to flow back, as it were, upon a cleared area and overwhelm it as with a flood of rank vegetation.

It should be remembered, however, that this dependence of man upon nature grows less and less with the advance of civilization. Man tends more and more to dominate nature through his greater knowledge of and control over physical forces. It is therefore true, as stated in the beginning of this chapter, that the human factor is today more important than the geographical factor.

The geographical advantages of the United States. Coming to our own country, we have a combination of most of the geographical factors mentioned by Buckle and others. We have the broken landscape, low mountain ranges, and small rivers of the Atlantic seaboard, the great fertile valley of the Mississippi and its tributaries, the vast plains of the great West, the semidesert conditions of the Southwest, the towering mountain ranges of the Rockies and the Sierras, and the mild climate and gentle slopes of the Pacific coast. If the mind of man is strongly influenced by its geographical surroundings, we have an opportunity of developing a many-sided and variegated civilization.

[1] In "The Second Jungle Book."

Rainfall. The eastern half of the United States, being virtually surrounded on three sides by water, like the greater part of Europe, is assured of an adequate quantity of moisture; the western half is more or less deficient in moisture, except the extreme northwest corner and certain high mountain altitudes. These arid and semiarid regions, where the streams do not supply water enough for irrigation, may, in places where conditions are favorable, be made to grow crops under methods known as dry farming. The rest will probably be a permanent grazing country. Even our irrigable land, while but a fraction of the total, amounts to a small empire in itself.

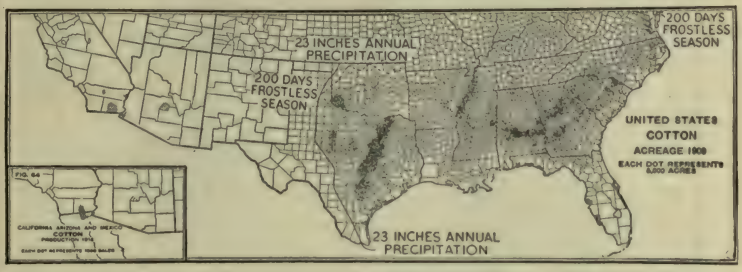
The great crop belts. A broad strip running from the Atlantic seaboard to the hundredth meridian, and a little north of the middle, comprises the great grain, hay, and live-stock region. Another broad strip, lying south of this, is the Cotton Belt. Along our northern border, from Maine to northern New York, is a lumber, dairy, and potato region and a natural summer playground for the city people. A continuation of this strip, including the northern halves of Michigan, Wisconsin, and Minnesota, is an undeveloped region, formerly covered with forest but now largely cut over. Most of it is excellent land for potatoes and small grains and is capable of feeding a vast population.

Another undeveloped strip along the Gulf coast from Florida to Texas, just south of the Cotton Belt, is also largely cut-over timberland. Much of this is ideal land for fruit and truck farming and the growing of such great food crops as sweet potatoes.

Whenever the demand for food is such as to insure a remunerative price for potatoes, both white and sweet, almost unimaginable quantities can be grown along our northern and southern borders without interfering with the growing of corn, wheat, or cotton in the belts which are especially adapted to these great crops. So far as starchy food is concerned we have opportunities for producing incalculable quantities. Animal products also can be produced in quantities sufficient for a population very much greater than the present, though it is easy for unthinking people greatly to exaggerate the possibilities in this direction.

The central valley. The Mississippi Valley—that is, the whole interior basin of the country—is one of the most productive regions in the entire world. In fact, it is doubtful if any region of equal area can be found anywhere on the globe which contains so great a variety and abundance of natural riches, both on the surface and beneath the surface.

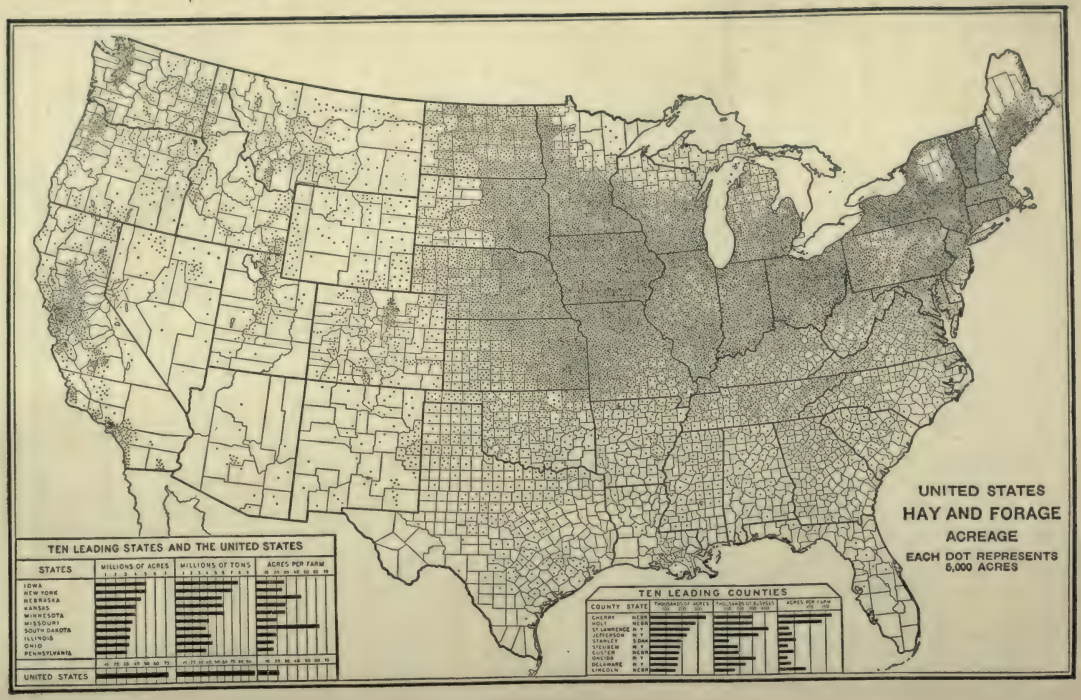
This region includes the greater part of our Cotton Belt, and we produce nearly three fourths of the cotton of the world. It includes all of what is known as our Corn Belt; that is, the region where corn is the main crop, though corn is grown in every state



THE SOURCE OF THE GREATER PART OF THE WORLD'S CLOTHING

in the Union. Corn is not only our most valuable crop but our most valuable single product of any kind or description; we also grow nearly three fourths of the world's production of this, the most magnificent of all crops. In this region are also the great spring-wheat areas of Minnesota and the Dakotas and the winter-wheat area extending from Ohio to the Great Plains, reaching its greatest density in Kansas and Nebraska. While we produce on the average only between a fourth and a third of the world's total wheat crop, we yet produce more than any other single country at the present time. Aside from these major crops, this region is also rich in a number of minor crops and grows practically everything which will grow outside the tropics.

Farm machinery. The reasons for this great productivity are, first, the vast area; second, the uniform fertility of the soil; third, the uniformly level contour, making farm operations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NEW YORK
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MINNESOTA
MISSOURI
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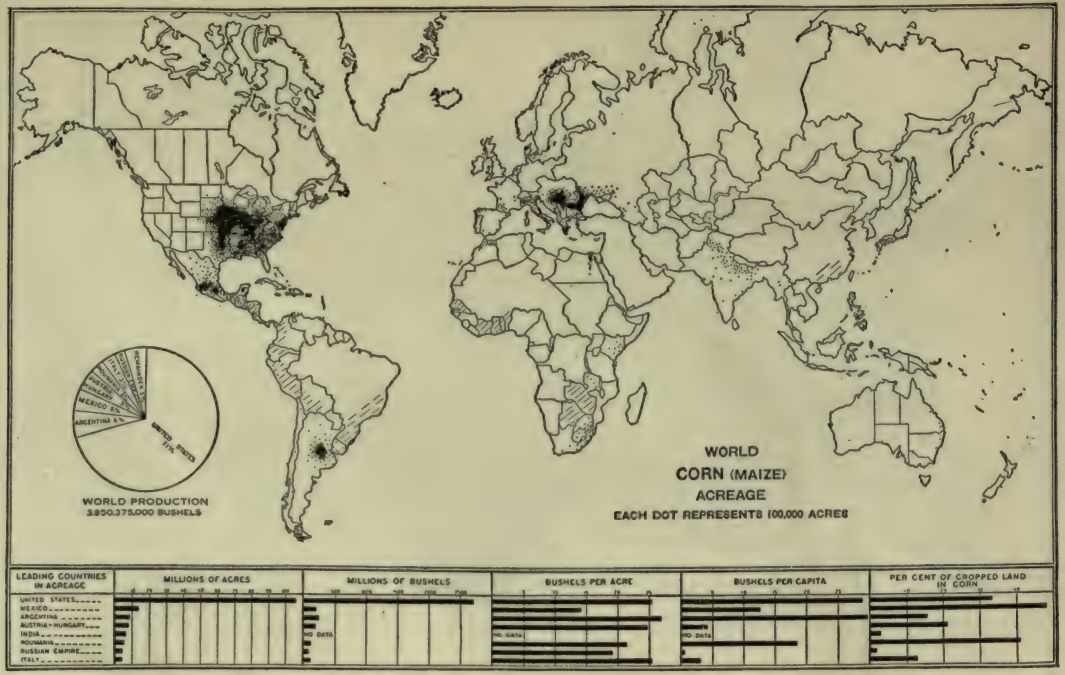
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ARGENTINA
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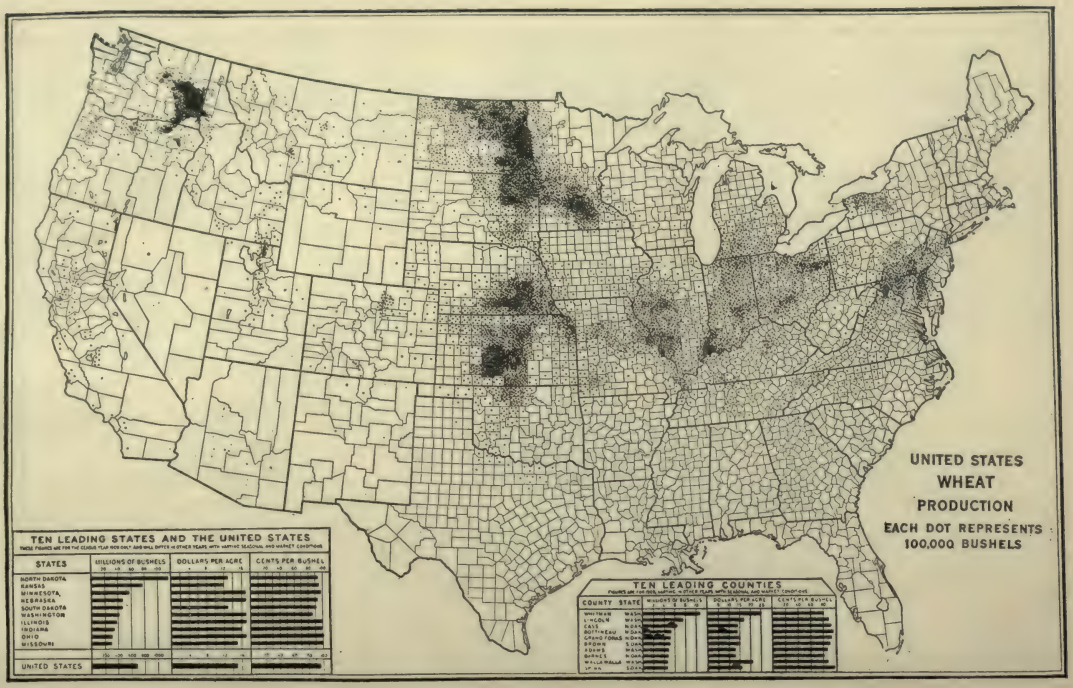
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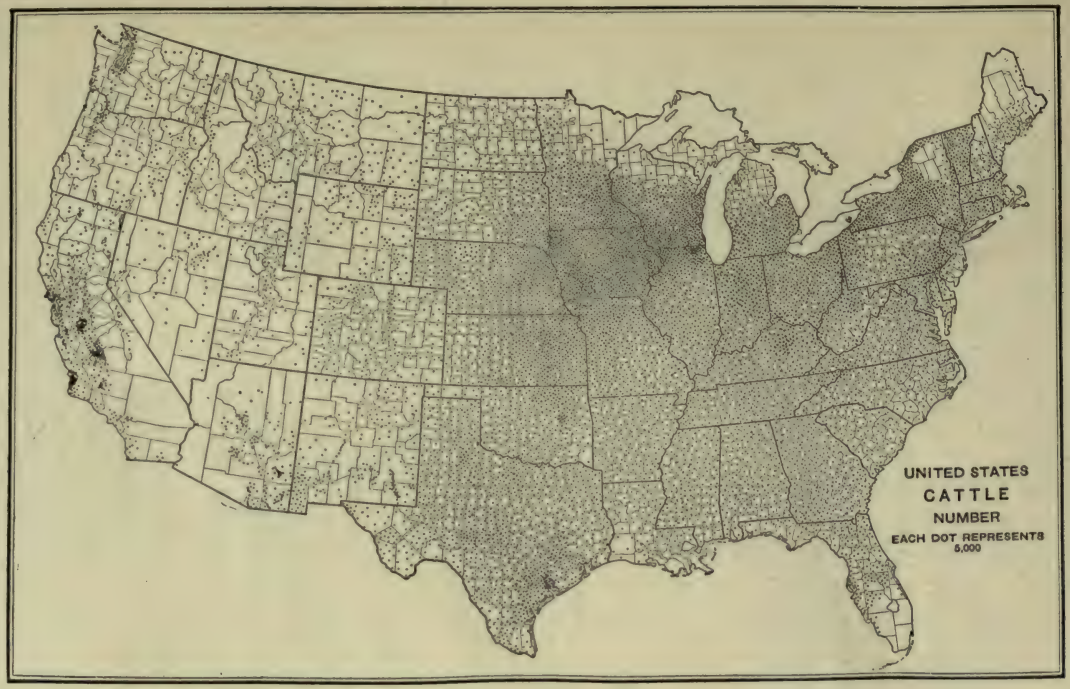
UNITED STATES
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relatively easy and inexpensive; fourth, the uniformly favorable climate; fifth, the general use of farm machinery. There is probably no single area in the world where so much and such efficient farm machinery is used in order to supplement the labor of men.

In addition to the natural ingenuity of our people, the general smoothness of the land and the favorableness of the climate must be held to account for the use of farm machinery. The summers (especially the late summer months) in this region are relatively dry. This has had an important effect in encouraging the use of harvesting and haymaking machinery. In some of the countries of northwestern Europe, where clear, dry weather is rare, the curing of hay and the drying of harvested grain are more difficult problems than with us. The quick curing and rapid methods of harvesting and storing which are familiar to us are there impossible.

Mineral wealth. Beneath the soil in this region lies a wealth of minerals. Bituminous coal underlies a great deal of it from Pennsylvania to Wyoming. Petroleum and natural gas abound in the same region, and oil fields extend southward to the Gulf. Some of the richest and most extensive beds of iron in the world lie in northern Michigan and Minnesota.

Ease of transportation. Throughout this region transportation is easy. The Great Lakes furnish cheap water transportation, as do (to a less extent) the Mississippi and its larger tributaries. But its greatest advantage for transportation is its wide extent and its level contour, making railroad building and operation relatively inexpensive.

Bordering on this vast region, which must more and more become the real home and habitat of the American people, are the Atlantic and Pacific seaboards, adding other mineral wealth, forests, water power, fisheries, and opportunities for foreign trade to the wealth-producing power of the whole.

Reasons for modesty as well as for pride. Before we take too much credit for our national wealth and prosperity we should ask ourselves to what extent we are responsible for it and to

what extent nature assisted us. It will be a wholesome exercise for us to write down a list of achievements in what we have led the world, and then to ascertain to what extent these are due to our own intelligence, energy, courage, and devotion to ideals and to what extent to our favorable geographical situation and the richness of our resources.

We produce more iron and steel, more corn, cotton, and wheat, than any other country. There are excellent geographical reasons why we should. Mechanical inventions, the breeding of the trotting horse, and the building of public libraries are among the activities in which we have surpassed other people without the special aid of superior physical advantages.

EXERCISES

1. What is meant by a favorable geographical situation?

2. Where do most crops reach their highest development?

3. Does man's dominion over nature increase or does it decrease with the advance of civilization?

4. Are the tropics more favorable or are they less favorable to man's development than the temperate zones? Give reasons.

5. Name some of the geographical advantages of the United States (1) in agriculture, (2) in mining, (3) in transportation, (4) in manufacturing.

6. Name some activities in which the people of the United States excel the rest of the world. Has our success been due mainly to ourselves, to our geographical situation, or to a combination of both?

CHAPTER IV

THE QUALITY OF THE PEOPLE

If the human factor is, as stated in Chapters I and III, the most important factor in national prosperity, it is more important that we study this factor than that we study the geographical situation. The human factor includes the people themselves and their institutions—their habits, customs, laws, government, morals, and religion. In this chapter we are to consider the quality of the people themselves and, in the chapters which follow, some of their institutions.

Why man rules over the rest of animal creation. In attempting to discuss the quality of the people we must limit ourselves to a few of the most important facts. There are certain outstanding qualities which man possesses in greater degree than the brutes, which civilized man possesses in greater degree than the savage, and which, in any civilized community, the more successful classes possess in greater degree than the less successful. There are other qualities, such as muscular strength, which the brutes, many of them at least, possess, in greater degree than man. If these were the important qualities, man could scarcely claim superiority over the brutes. There are other qualities, such as the sense of smell and the ability to endure pain, which certain savages seem to possess in greater degree than civilized man. If these were the important qualities, civilized man could scarcely claim superiority.

Our present problem is to form some sort of intelligent opinion as to the qualities which a people need in order to become prosperous, powerful, and great in an economic and worldly sense. The following outline is suggested. Whatever may be said on purely religious or moral grounds, a nation whose people are possessed of these qualities in superior degree will have an economic advantage over a nation whose people possess them in less degree.

THE CHARACTERISTICS OF A CAPABLE RACE

1. Knowledge of
   a. The physical world
   b. The world of men
2. Forethought, as shown by
   a. Industry
   b. Thrift
3. Dependableness, made up of
   a. Honesty
   b. Sobriety
   c. Courage
   d. Fidelity
4. Reasonableness, as shown by
   a. Eagerness to learn
   b. Obedience to law
   c. Willingness to coöperate

Man has achieved "dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth" by reason of certain powers or qualities which he possesses in higher degree than they. These are, first, his greater knowledge of and control over the forces of nature; second, his greater forethought in making provision for the future and working for distant ends; third, his greater power of organization, or teamwork. This power of organization is the result mainly of two factors—his dependability and his reasonableness. The same powers, or qualities, have given the civilized man dominion over the savage and the intellectual man dominion over the ignorant man. In the future, as in the past, we must expect the world will be ruled by the nations which possess these qualities in the highest degree.

Physical advantages over the brutes. Man's erect posture, leaving his hands free to be used for other purposes than for locomotion, must be counted as a great advantage over the brute creation. A thumb which opposes the fingers and gives him a better grasp adds greatly to this advantage. These advantages, however, would not count for much if he did not have a mind which enabled him to devise tools to be grasped and used with his

thumbed hands. So far as the upright posture and the thumb are concerned, while they give man an advantage over the brutes, they alone do not give the civilized man any advantage over the savage. The posture of the savage is as upright, and his thumb as handy, as the civilized man's. In seeking, therefore, the advantages which have given the civilized man dominion over the savage we must look at the mental and moral qualities.

Intellectual advantages of civilized man over savages. Knowledge of the forces of nature may almost be said to include control over them, though the erect posture and the thumb assist in that control. The physical world includes not only the physical objects which surround us but their properties and the forces which govern them as well. To know our physical world, therefore, means to know the properties of matter and the forces which operate in and through it. In short, this is to have scientific knowledge. It is this which underlies all our mechanical improvements. Our social environment includes human beings and all their powers, characteristics, habits, emotions, etc. A knowledge of one's social environment includes such a knowledge of man and his ways as will enable one to work with other men comfortably, knowing what to expect and what to depend upon. This is particularly important in those who are intrusted with the work of governing.

Forethought. Forethought is only one aspect of what may be called the time sense. Among the many definitions of man is one which says that he is the being "who looks before and after." His memory of the distant past and forethought for the distant future modify his actions in the immediate present more than the actions of any other creature are modified.

Even industry is chiefly carried on because of the vivid appreciation in the present of those needs which are certain to arise in the future. Those creatures which appreciate future needs most vividly will, of course, labor most assiduously. The same difference shows itself among men. Those nations and those individuals who see most clearly in advance what their future needs are likely to be are the nations and the individuals who show the greatest industry and the greatest thrift.

Thrift. Thrift differs from industry in that it consists in saving that which is already produced or possessed, whereas industry consists in producing or gaining possession of desirable objects. Even more than industry, thrift is a mark of forethought. It requires an even stronger self-control, combined with a keener sense of the importance of future needs, to lead one to refrain from consuming that which is already produced than it does to work to produce that which does not yet exist. However, the two things must always go together, in the community at least if not in the individual. Some farmer must save seed before any farmer can labor successfully at the growing of next year's crop.

Knowledge and forethought are primarily mental qualities, though there is an element of morality in forethought; dependableness and reasonableness are primarily moral qualities, though there is an element of mentality in both of them. In this age of great mental achievements, especially in the fields of physical science and mechanical invention, there is a tendency to underestimate the importance of moral qualities. This tendency may have been increased by the perception that moral teachers themselves have sometimes overemphasized the lesser virtues—that is, those which count least in the improvement of human life—and underemphasized those which count most.

Moral advantages of civilized men over savages—dependableness. Nothing can be more important in the building of a great and prosperous nation than dependableness. Many writers have taken pains to point out how dependent we are upon one another in a highly civilized state. One way of illustrating this mutual dependence is by comparing a highly developed society with a complicated machine or a highly developed animal organism. There are many striking resemblances, among the most important of which is the interdependence of parts.

This interdependence of parts increases as we ascend in the scale of organic life. In the human body, for example, or in that of any of the higher mammals the interdependence of parts is much greater than that found in the bodies of the lower forms of life. The same change is noticeable as we ascend in the scale of

social life. Each individual tends to specialize in some particular kind of work and to depend upon other individuals who have specialized in other kinds of work to supply him with goods and services which he cannot produce or perform for himself. Some of the reasons why this is so advantageous will be discussed in the chapter on The Division of Labor.

There can be no great amount of dependence of one upon another where the people are not dependable. This is equally true of a machine or an animal organism, but we do not attribute moral qualities to the parts of any of them. The wheel in a machine has no choice. It must of physical necessity do whatever its construction requires it to do. Although there is no physical necessity compelling a person to be dependable, as is the case with the parts of a well-made machine or the organs of a healthy body, yet it is just as important that he should be; otherwise civilization cannot advance at all.

Our mutual dependence is of various sorts and degrees. If someone fails to do that which he is expected to do, he may imperil the lives of hundreds or thousands of his fellow men, as in the case of a switch tender or a locomotive engineer; he may occasion the loss of valuable property or he may, as in the case of an unpunctual person, merely upset our calculations and cause many of us to waste our time waiting for him or guessing what he is likely to do. In all these cases, in greater or less degree, the undependable person occasions loss to the nation. The time we waste on account of his lack of dependableness is as truly a loss as the property which is destroyed. Aside from the direct loss of time and property there is the greater loss which comes from the discouragement of enterprise, the lack of confidence, and the general demoralization which ensue when men can no longer rely upon one another. When we can no longer depend upon others to do their special work well and regularly we shall have to learn to do everything for ourselves. We thus lose the advantages of specialization.

Honesty. The first element in dependableness is common honesty. Men who will not keep their word, fulfill their contracts,

or do business without cheating are not only morally odious, they are also obstructions to the progress and prosperity of the community. Perhaps this is why they are morally odious. A community made up of such people, no matter how gifted they might be mentally, could scarcely prosper. No one could trust anyone else; consequently there could be no credit. Nothing could be bought or sold without the closest and most minute inspection, and this would be laborious and therefore wasteful of time. There could be no coöperation or teamwork, but everyone would have to look after himself and spend a great deal of time watching his dishonest neighbors. Among the many advantages of honesty, therefore, not the least is that it is a great labor-saving device when it is practiced throughout a community.

Sobriety. Next to honesty, sobriety is probably the most important element in dependableness. In a rudimentary state of society, where each individual works and acts most of the time alone and where, therefore, there is little interdependence, drunkenness may not be so vicious as it has now become. In our interlocking civilization no personal habit or vice so unfits a man for usefulness as drunkenness. If you had to take your choice between riding behind a locomotive engineer who was addicted to drunkenness and riding behind one who was addicted to any other vice, there is not much doubt as to which you would choose. If you had to take your choice between having chauffeurs on the street who were in the habit of getting drunk and having those who had formed any other bad habit whatsoever, you would not be likely to prefer the drunkards.

Apply a similar test to anyone in any of the hundreds of responsible positions (and all positions are coming to be responsible positions), and you will reach the conclusion that the person who is strongly addicted to drink is about the least dependable, and therefore the least desirable, citizen you can name. There are fewer places where he is of any use and more where he is a menace than is the case with the victims of almost any other vice. Whatever you may think when you are discussing, in the abstract, the relative harmfulness of various vices, you are not likely to be

much in doubt when you come to a concrete case like that of a locomotive engineer, a switchman, a driver of an automobile, or even a janitor or anyone else whose lack of dependableness might endanger your life. Sobriety must obviously rank high among the virtues which go to make up what we have called dependableness.

Courage. Courage is the father of many virtues, as fear is of many vices. It is probable that as many falsehoods result from fear as from malice. In any kind of emergency you will want dependable companions who will not fail you. Their dependableness will be in proportion to their courage. Even your own courage may depend partly upon their courage, and theirs upon yours; that is to say, when you feel that you can rely upon one another you will all feel more courageous and more capable of coping with a difficult situation than if each of you doubts the courage of the others. This applies not only to physical courage in a time of physical danger but to moral courage in times when the larger interests of society are at stake. Men of little courage fear to come out on the right side, and even men of real courage have their confidence shaken by the feeling that they cannot depend upon their fellow citizens.

Fidelity. Fidelity is closely related both to honesty and to courage and serves much the same purpose. It is the quality which keeps faith even though one might gain some individual advantage by breaking faith. The habit of breaking faith or abusing confidence demoralizes a group or a community and makes any kind of effective teamwork impossible.

There are doubtless many other elements which contribute to the dependableness of a people, but the four mentioned are the principal ones. Any group of people who possess these in high degree can rely upon and coöperate with one another and carry out any form of teamwork which they have the intelligence to plan. A community whose people are weak in any one of these four qualities will have difficulty in carrying out any effective scheme of group action, no matter how clearly they perceive the advantage of doing so. While these are moral qualities, nevertheless the economic prosperity of the nation depends upon them. They are,

therefore, of just as much interest to the economist as technical skill, good tools, good land, mineral resources, or any other factor.

Reasonableness. Reasonableness is a noticeable characteristic of progressive people, as its absence is of unprogressive people. It includes freedom from prejudice, passion, and superstition, willingness to take a sensible view of things and to be guided by sound judgment rather than by passion, stubbornness, or general contrariness. It is opposed equally to the slavish following of old customs, on the one hand, and blind and headlong pursuit of new fads, on the other. It involves a frank recognition of all the necessary conditions of social life and teamwork and a willingness to submit to those conditions even at some inconvenience to self. It involves the willingness to help in any genuine reform movement, even at some inconvenience to self, and likewise a recognition of the necessary and legally constituted methods of effective reform.

Teachableness. The first element in reasonableness is teachableness, or eagerness to learn, especially to learn better ways of doing the work which we have to do. Travelers among backward races give many strange accounts, not simply of the ineffective methods of work, which we might expect, but of the unwillingness of the people to learn new ways even when they are shown. One railroad builder who was forced to employ native laborers in a backward country, which need not be named, found that they were accustomed to carry all burdens on their heads. In moving dirt they insisted even on carrying it in boxes and various receptacles on their heads. He supplied them with wheelbarrows and gave orders that they were to use these and nothing else. They used the wheelbarrows, but carried them also on their heads, and nothing could induce them to change their immemorial custom. No nation whose people are so unteachable as this is likely to become prosperous, or great in any sense, no matter how well endowed it may be with natural resources.

This difficulty is not simply a lack of knowledge. It is more fundamental than that. It is a habit of mind which resists knowledge, which refuses to accept knowledge even when it is presented. Whether this is due to some defect in the physiology of

the people or merely to bad teaching in the past it may be difficult to determine. That there are real differences of this kind among people there can be little reasonable doubt. A wise but strong ruler who would establish a system of compulsory education and enforce it rigidly could doubtless accomplish a great deal in the way of increasing the teachableness of the people. During their enforced schooling they would form the habit of learning, and the pain of a new idea would be greatly reduced. A wise majority in a democracy might do the same thing for an unwise minority.

Covetousness. There is another form of unreasonableness, and it is probably the most destructive of all, which takes the form of jealousy or resentfulness at the success of other people. It is the worst form, perhaps the only real form, of covetousness. There are few things which so deaden the enterprising and constructive spirit of a people as this form of resentfulness, and there are few things which so encourage that spirit as a generous appreciation, on the part of everyone, of real achievement wherever it is found.

Obedience to law. Another important element in reasonableness is the recognition of the fact that if we are going to live together in groups it is necessary for each of us to submit to many regulations, some of them at times irksome, which would be unnecessary if we could live as isolated individuals. This is commonly called obedience to law. This need not be a slavish acceptance of all laws as they now stand, but it at least involves a recognition of the orderly and legally constituted methods of changing laws rather than a stubborn and brutal defiance of those which we do not happen to like. The purpose of law is not to repress or obstruct, but to make free—to release energy. The traffic policeman on a crowded street corner is a good illustration of all enforcement of law. He is not there to obstruct or hinder traffic, though he does undoubtedly hinder some unreasonable people from doing what they would like to do. But as the result of such hindrances, traffic can move more freely than it could without them, and thus the average person actually enjoys greater freedom of movement than would otherwise be possible. A reasonable person always recognizes this fact and submits to such regulations.

The world has generally been dominated by peoples who were law-abiding. No nation whose people refused to submit to the necessary regulations could ever hope to grow prosperous or powerful enough to play much of a part in civilization. It would be as reasonable to expect a disorganized mob, each individual of which followed his own whims, to succeed against a well-organized and well-disciplined army. The results of a lack of discipline come more quickly in war than in peace, but they are no more certain in the one case than in the other. It is particularly important that this kind of reasonableness shall exist in a democracy. Under a despotism the subjects may be compelled by fear to submit to regulations; in a democracy their submission must be largely voluntary. In other words, it depends upon the reasonableness of the people.

Willingness to coöperate. Willingness to coöperate, where coöperation is desirable, even without legal compulsion, is a very important factor in the prosperity of any community. Even where everyone agrees that coöperation is needed it is frequently difficult to get people to coöperate for community work. The reasons are many, and some of them are hard to understand. Personal jealousies, old grudges, mutual distrust, and even general all-round meanness are given as the principal reasons. It is sometimes said that the lack of leaders is the great difficulty. It is quite as frequently the lack of followers. Everyone wants to be a leader and is not willing to follow anyone else. With such a spirit among the people the indispensable man is more likely to be the orator or the persuader than the statesman or the administrator. A people among whom the efficient man is popular will never be outstripped in the arts of peace or beaten in war by a people among whom only a demagogue or even a persuasive orator can be popular.

Heredity and training. A great deal has been written regarding the comparative importance of heredity and training in the determination of ability and character. Some have gone to the extreme of saying that heredity is everything, that a genius will always become a genius in spite of the lack of educational

advantages,—in short, that he will find his own means of education. Others have gone so far as to deny that heredity has anything to do with a man's ability; they claim that it is all in his education, including under education all the influences which have been at work since his birth in developing his mind or shaping his character. The truth, as in most such cases, seems to be somewhere between these extremes. There is no doubt whatever that men of average natural ability may be greatly improved by education and training, nor is there any reasonable doubt that some are capable of being trained much more highly than others because of a difference in natural ability.

Early education can improve the present generation. Whatever may be said regarding the relative importance of the natural ability of the people and their training, it is absolutely certain that it is more important for the present generation to give attention to the problem of its own training than to the problem of its own heredity. The latter cannot now be changed, and there is no use worrying about it. The only thing to do is to make the most of its inheritance and see that it gets the best possible training. The only heredity we need to worry about is that of future generations.

EXERCISES

1. Is man superior to the brutes in every respect? In what respects does he excel them?

2. Is the civilized man superior to the savage in every respect? In what respects is he superior?

3. Do you consider those qualities in which the civilized man excels the savage as more important or less important than those qualities in which the savage excels the civilized man? Why?

4. Of what advantage is forethought? How do men show forethought?

5. Of what advantage is dependableness? Is it growing more important? Why? How do men show dependableness?

6. Of what advantage is reasonableness? How do men show reasonableness?

7. What are the principal factors in the improvement of the quality of a people?

CHAPTER V

COMPETITION

What is competition? In the last chapter we considered the quality of the people themselves. We have next to consider some of their ways of doing things, their leading habits, customs, and institutions, in so far as these affect their prosperity. One of their noticeable ways is that which is known as competition. This refers to a way we have of striving, sometimes against one another, to get what we want. When there is one prize to be won and more than one person who would like to win it, there is pretty certain to be rivalry. If, in order to win it, one must do something useful rather than harmful, there will be rivalry in doing something useful. That is called competition. If, however, it may be won by doing something harmful rather than useful, there is likely to be rivalry in doing harm. This is not competition, but war or swindling or something of that kind.

Why we compete. In no case is there competition except where there is scarcity. If there were enough prizes for everybody and they were all of the same desirability, there would be nothing for which to compete. But if there are not enough of the best prizes to satisfy everybody, there is pretty certain to be competition. We do not ordinarily compete for air because we all have enough. Where water is abundant we do not compete for it; where it is scarce we do.

The struggle for existence. It is a common error to speak of competition as though it were synonymous with war or with the struggle for existence as it is carried on among brutes. That competition is a form of conflict there can be no doubt, nor can it be denied that it is a phase of the all-but-universal struggle for existence. But there are many forms of conflict besides war, and there are many ways of struggling for existence without resorting

to the destructive methods of brutes. The forms of conflict or the methods of struggling for existence may be classified as follows:

- Methods of struggling for existence
  - Destructive
    - War
    - Robbery
    - Dueling
    - Sabotage
    - Brawling
  - Deceptive
    - Thieving
    - Swindling
    - Adulteration of goods
    - False advertising
    - Demagogy
  - Persuasive
    - Political
      - Courting for royal favor
      - Courting the sovereign people
      - Campaigning for office
    - Erotic
      - Polite social intercourse
      - Courting the opposite sex
    - Commercial
      - Advertising
      - Salesmanship
    - Judicial
      - "Leaving it to the crowd"
      - Litigation before the courts
  - Productive
    - Rivalry in producing goods
    - Rivalry in rendering service

Various forms of conflict. The methods named in the foregoing outline may be explained and illustrated as follows: By destructive methods are meant all those whereby one succeeds by virtue of one's power to kill, to hurt, or to inspire fear of physical injury or pain. "War," "robbery," "dueling," "sabotage," and "brawling" are names for methods of destruction as carried on by human beings. By the persuasive methods are meant all those methods whereby one succeeds by virtue of one's power to persuade or to convince. One may beat one's rival by being a more persuasive talker, whether one is striving for favors from the sovereign person or from the sovereign people, whether one is striving for the hand of a lady, the decision of a jury, or the trade of a possible customer. By the productive methods are meant all those

methods whereby one may beat one's rivals or gain advantages by virtue of one's power to produce, to serve, or to confer benefit.

The same persons may resort to more than one of these methods in order to gain an advantage. When two farmers compete in growing crops they are struggling for existence, or for economic advantage, by a productive method. When they quarrel over a line fence and take their quarrel before a court for settlement they are struggling by a persuasive method. When they secretly alter or remove landmarks in order to gain an advantage in their litigation, or when they bribe jurors, they are struggling by a deceptive method. When they fall to fighting either with fists or with weapons they are struggling by a destructive method.

When they change their methods in the order just described, they are sinking lower and lower in the scale; that is, they are resorting to worse and worse methods of struggling for existence or advantage. When they rival one another in growing corn, there is more corn grown as the result of that rivalry. The country is better fed and everyone is better off, except possibly the one who is beaten, and even he may very likely be better off than he would have been if he had not competed at all. When two farmers quarrel over a line fence and take it into court, no one gains any benefit except the lawyers, and what the lawyers gain the farmers lose. No new land is created by that conflict. No new wealth is produced. The community is no better fed, and the farmers have wasted their time. To change from persuasion to deception or from deception to physical force is so clearly to sink to a lower level that it is unnecessary to pursue the topic farther.

Destructive and deceptive methods of brutes. It will be apparent to anyone who will study the diagram on page 40 that among animals the destructive and deceptive methods are the characteristic forms of struggle. They kill, maim, injure, rob, and deceive one another with no moral or legal restraints. They may sometimes rise to the level of persuasion, as in the courting process, but never to the level of production; that is, no animal ever tries to beat its rival by producing a larger or better product or rendering a greater or better service.

Among human beings who have no moral sense and who are unrestrained by law and justice the destructive and deceptive methods of struggle will be followed as well as the persuasive and productive methods, but the destructive and deceptive methods are precisely the things that morals and laws are designed to prevent. In any civilization worthy of the name and under any government worthy to stand overnight, men are actually restrained by their own moral feelings, by the respect for the good opinions of their fellows, and by the fear of legal penalties from attempting to promote their own interests by destruction or deception.

Meaning of crime. To say that men are restrained from doing these things is not the same as to say that they are absolutely prevented. "Crime" is the name we give to destructive and deceptive methods of struggling, and it still flourishes, though the government is trying to stop it. We are trying to raise the struggle for existence to a higher plane than that on which it is waged in the subhuman world. The aim is to prevent destruction and deception and to compel men to succeed, if they succeed at all, by persuasion or production. There are, however, some more or less refined methods of deception which have not even been declared illegal by legislation. If we can so improve our legislation as to prohibit every form of deception as well as destruction, and if we can so improve our executive and judicial systems as to prevent absolutely the violation of law, we shall have reached the ideal of government control over the struggle for existence.

Is it wrong to compete? There are a few people who object on principle to all forms of competition, who believe that the whole competitive system is morally wrong. This feeling, however, is probably due to a failure to discriminate, as we have tried to do in the preceding pages, between different kinds of conflict. The horrors of war and other forms of destructive conflict, the petty, skulking meanness which accompanies all forms of deceptive conflict, and even the jealousies and heartburnings which result from many forms of persuasive conflict have so impressed certain sensitive spirits as to cause them to revolt against the very idea of competition in any form. Such people ought never

to play croquet, because there is competition even there. An election, moreover, is as truly competitive as any form of business.

Universality of struggle. During the entire life of man on this planet he has had to struggle in one way or another against a multitude of enemies, human and nonhuman. The reason why we are here today is because our ancestors were successful in their struggles. They succeeded in living and reproducing their kind in spite of all the enemies and dangers which surrounded them. One reason why they struggled so successfully was that they were valiant enough to wage their fight with vigor and with spirit. That spirit we have inherited to such an extent that we cannot even amuse ourselves without some kind of competition or struggle. That is why most of our games are competitive. Competition is as the breath of life to our nostrils. It will be well for us if we can harness this spirit to productive work rather than allow it to waste itself in destruction, deception, or even in some fruitless kinds of persuasion. The nation which succeeds best in harnessing this spirit to production is the nation which should normally grow rapidly in wealth, prosperity, and power.

The spirit in which one competes. In assuming the universality and permanence of competition in some form it is not necessary to exclude such things as love, friendship, neighborliness, and coöperation. Competitors in a friendly game may be none the less friendly because they are competing. It is only when they care more for victory or the prize of victory than they do for friendship that competition interferes with friendship. This can be cured, however, not by abolishing competition but by learning to care for the right things and to evaluate them properly.

When men care more for money, which is the immediate prize of economic competition, than for honor, friendship, or justice, then competition is likely to be ruthless and destructive. When men care more for offices, the immediate prizes of political competition, than for the welfare of the country or the peace of the neighborhood, a political campaign is likely to become a ruthless and destructive game. And when football men care more for victory than for sport or honor, football becomes a game unfit for gentlemen.

In all these cases the evil is not in competition itself but in the false system of valuations in the minds of the competitors. So long as business men realize that there are other things more precious than money, so long as politicians realize that there are other things more important than winning offices, so long as football men realize that there are other things greater than victory, all these forms of competition are thoroughly compatible with the most sincere friendship.

We must conclude, therefore, that there is nothing wrong in competition in itself, otherwise most games would have to be condemned. It is wrong and uneconomical, however, to try to gain one's ends by destructive or deceptive methods. Moreover, to do so is contrary to law. We are permitted by law to compete by the methods of persuasion and production. It is especially economical for everyone to compete in production or in the performance of service. The more universally our people compete in production, and the more strenuously they compete, the more production and the better service we shall have and the better off everybody will be. Competitive bargaining, which is a kind of persuasion, sometimes works well and sometimes badly. It works badly, however, mainly when someone has a great advantage over another in the bargaining process. When the advantages are equalized even competitive bargaining usually works well, unless it begins to verge on deception.

EXERCISES

1. What is meant by competition?
2. Why do we compete?
3. What is meant by destructive methods of struggling for existence? Are such methods legal among civilized men?
4. What is meant by deceptive methods?
5. What is meant by persuasive methods? Are such methods legal among civilized men? Ought they to be?
6. What is meant by productive methods? Are such methods legal among civilized men? Ought they to be?
7. What, if any, of the above methods do you approve? Why?
8. Does the spirit in which one competes make any difference?

CHAPTER VI

COÖPERATION

Prevalence of coöperation. In the midst of all the competition that is going on there is a great deal of coöperation. That is true even of the brutes in their brutal struggle for existence. There is much mutual aid, much working together for a common end, especially among the gregarious animals. They will unite for mutual defense or mutual attack, they will play together, though much of their play takes the form of practice for attack or defense, and they frequently act in unison through sheer friendliness with no apparent competitive or warlike purpose. All this is true in still greater degree of human beings, especially the more civilized.

Meaning of coöperation. Coöperation may be defined as consciously working together for a common end. When a number of persons work consciously together to accomplish a given purpose, with no element of personal rivalry, or, if it exists, with the element of personal rivalry kept out of sight, there is said to be coöperation. This is a way of doing things which must be taken account of in any general study of the conditions of national prosperity. It has many advantages, but it is by no means so general as competition.

Coöperation a form of competition. Coöperation, as it is generally practiced, is only a method of competing more effectively. There is coöperation among the members of an athletic team. Their teamwork consists in working together smoothly and effectively, but the purpose of this teamwork, or coöperation, is to enable them to compete more effectively against the opposing team. It would be difficult to find or to name an instance of coöperation which did not, directly or indirectly, enable the coöperators to compete more successfully than they were able to do when working alone as individuals. Coöperation in business is really the

principle of teamwork applied to business competition. Within the coöperating group, as within the athletic team, competition among members is reduced. But competition between coöperating groups, or between the group and those outside the group, is quite as sharp as it would be if there were no coöperative groups. Again, when a coöperative group becomes large there arises within the group a certain amount of competition for offices and other advantages.

Coöperation is an excellent thing under certain conditions, and wherever the conditions call for it every reasonable effort should be made to encourage it; but the encouragement should be given with a full understanding of its limitations and of its real relation to the competitive process. More coöperative societies have failed than have succeeded. One of the principal reasons for failure has been that the promoters have imagined that there was in coöperation something inherently superior to competition and that it ought to be substituted for competition anywhere and everywhere. The truth seems to be that coöperation is called for only under certain special conditions where teamwork is required in order to secure large results.

Where coöperation is successful. A careful study of coöperation will show that it has seldom succeeded in the field of production. Its chief successes have been achieved in merchandising; that is, in buying and selling. Except among a few religious societies, which are held together by a powerful religious sentiment, the author does not know of a single case where coöperative farming has succeeded. By coöperative farming is meant the running of the productive work of growing crops under a coöperative system. There are many cases, however, in which groups of farmers have coöperated in buying and selling, in marketing their products, in purchasing their supplies, and in securing capital on advantageous terms. There are also many cases in which they have coöperated in running creameries, cheese factories, and grain elevators. These are parts of their marketing system. Again, it must be remembered that the farmers do not themselves operate these establishments. They own them and they furnish the capital

to run them, but they hire others to manage them and to do the work. The men who work in these establishments are not co-operators, but receive wages and salaries precisely as they would if the establishments were owned by private individuals.

Two fields of business competition. There is a fundamental reason why coöperative enterprises have not flourished in the field of production as often as they have in the field of buying and selling. This reason is found in the two kinds of business competition,—competitive production and competitive bargaining. Competitive production means rivalry to see who can produce the largest and the best product; competitive bargaining means trying to get the better of a bargain. Competitive production always works well; competitive bargaining sometimes works well and sometimes badly. Since competitive production always works well, there is no advantage in changing to coöperative production. No one has a sufficiently strong motive to induce him to give his time and energy to the running of a coöperative society in the field of production. Since there are no evils connected with competitive production, there is not enough to be gained by coöperative production to lead anyone to sacrifice his time and effort in order to make it succeed.

In the field of competitive bargaining, however, evils frequently spring up. Where a small and compact body of dealers are buying from a large and widely scattered body of producers the latter are at a great disadvantage in the bargaining process. Where this is the case it is necessary for the producers to get together in a coöperative organization in order to bargain on equal terms with the dealers. Where there is such a need as this someone may have a motive that is sufficiently strong to induce him to give his time and attention, to sit up nights, to labor in season and out of season, to keep the coöperative society together and make it succeed. Without some such motive as this, coöperation has seldom or never succeeded.

Competitive consumption. There is another kind of competition which always works badly. It is even worse than competitive bargaining. It may be called competitive consumption. By

competitive consumption is meant a rivalry in display, in ostentation, in the effort to outshine or to outdress all one's neighbors or at least not to be outshone or outdressed by them. This is not business competition, however, though it can be called a kind of economic competition.

Various forms of economic competition. From what has been said it will appear that economic competition is not synonymous with the productive methods of struggling for existence as outlined in the beginning of the preceding chapter. There is such a thing, it is true, as competitive production, but competitive bargaining is partly persuasive and partly deceptive. It is persuasive when it takes the form of clever advertising, of expert salesmanship, or of shrewd and reasonably honest bargaining; it is deceptive when cleverness in advertising takes the form of artistic lying (of overstating the merits of an article advertised) or when expert salesmanship takes the same form.

Competitive consumption has no productive features about it. The effort to keep up appearances, to dress better than one can afford, to spend money for purposes of display, are all deceptive, besides being wasteful and to that extent destructive. These, however, are among the more refined and less repulsive forms of destruction. For this reason, perhaps, neither law nor public sentiment has condemned them very definitely as yet.

In what fields coöperation may succeed. They who are interested in promoting coöperation should bear all this in mind. It is a waste of time and energy to try to substitute coöperation for competition in all cases. In the first place, it cannot be done, because so long as people show a preference for themselves and those who are near them, as against others who are farther from them, competition in some form will exist. In the second place, even if coöperation could be substituted for competition, it would be undesirable in many cases, though desirable in others. That is to say, there are some cases in which competition works so well that coöperation could not improve upon it. To be more specific, competitive production, as stated before, always works well. No one has yet succeeded in making coöperation in production, either

on a large scale or on a small scale, work successfully for a long period of time.

This is not saying that producers may not occasionally cooperate, as when farmers help one another in special lines of work. In our rural communities, especially in previous generations, there were many barn raisings, log rollings, corn huskings, and other examples of genuine and beneficial coöperation. But these events were only incidents in a kind of life which remained, in spite of them, predominantly competitive.

Even competitive bargaining sometimes works well. Where this is the case nothing is to be gained by coöperation, and it is therefore certain to fail, because the coöperators will sooner or later lose their enthusiasm when they see that they are not gaining anything by it; that is, when they see that it is not working any better than competition. The would-be coöperators should choose for their field of effort some situation where competitive bargaining is working badly. There they will have a chance of success. But no coöperative scheme runs itself. Even where there is a distinct and undoubted need for it, it will succeed only when some capable person gives a great deal of time and study and hard work to it.

Compulsion versus voluntary agreement. With an unerring instinct for economic error a certain class of writers have persistently obscured this question of coöperation versus competition by confusing it with the question of working under compulsion versus working under freedom of contract. The Panama Canal was not built coöperatively. The government of the United States decided to hire others to do it instead of bargaining with contractors. All who did the work did not coöperate, any more than the men who build our railroads and factories or work on our streets. If a large number of farmers unite to run a creamery or a shoe factory of their own, but do not work in it themselves, they sometimes call it a coöperative creamery or shoe factory. In reality it is only quasi coöperative. The people who do the work in the factory are hired and have no more to say about the management than they would have if the factory were owned by an ordinary joint-stock corporation.

A coöperative shoe factory, of the class which we are now discussing, is merely an organization of consumers formed for the purpose of bargaining for shoes for its individual members more successfully than they could do individually. It finds that it can bargain directly with workingmen, tanneries, and others to better advantage than it can bargain with private owners.

Coöperation in setting standards of consumption. There is always an acute need for a kind of coöperation that can stop competitive consumption. Unfortunately that need is not very widely understood. One reason why it costs us so much to live is that we are always trying to keep up with someone else. "It takes all my income," said a certain congressman, "to keep up with my fool neighbors." He was expressing in this picturesque manner one of the profound facts of our economic life.[1] The things which cost us so much money are not the things which we prize for their own sakes, but the things which we feel that we must have because our neighbors have them. The individual finds himself almost helpless. "As well be out of the world as out of style" is a saying which pretty well sums up the situation so far as the individual is concerned. But a large group of people who would coöperate in the work of setting their own styles need not be either out of style or out of the world. Educated people who understand this principle should take the lead. In so doing they would not only be doing themselves a favor, but they would be conferring a priceless benefit upon the whole nation.

EXERCISES

1. What is coöperation?
2. How is it related to competition?
3. Is it inherently better than competition? Why?
4. Is it always successful?
5. Under what conditions is it most likely to succeed?
6. Has coöperative production often succeeded? Why not?
7. What is meant by competitive consumption?

[1] Compare also Irving Bacheller's book entitled "Keeping up with Lizzie."

THE CENTER OF OUR GOVERNMENT

CHAPTER VII

LAW AND GOVERNMENT

The need for law. One of the most important of the things which the people do in order to achieve prosperity is to maintain a government to make and enforce law. Law and government have a most important part to perform in promoting the prosperity of the people. Bagehot[1] has said that the first great need of primitive man is for law,—definite, concise law. He even argued that it is more important that the law be definite and concise than that it be just, though both are of very great importance.

It is probable that a system of laws which are well understood because they are clear and concise and which are regularly enforced without variation or favoritism, even though they are in some respects unjust, is better for a people than a system of laws which are in essence just, but which are not clearly understood and not regularly and impartially enforced. When everyone knows definitely what the law is, and knows definitely that it will be enforced not only against him but equally in his defense, he at least knows what he can count upon. Nothing so discourages industry and enterprise as uncertainty as to what other men are likely to do, and uncertainty as to what government officials will do is one of the worst forms of uncertainty. When a legal regulation is universally and accurately enforced it begins to work like a law of nature. We never care to inquire whether the law of gravitation is just or not. We know that it is unavoidable and calculable, and therefore we manage to adjust ourselves to it most of the time.

The problem as to what the government can do, through its laws and its administration, for the promotion of the economic

[1] "Physics and Politics" (fifth edition), p. 21. London, 1879.

prosperity of the people is of the very greatest importance. The specific aim should be to call out the very best and most productive efforts of every individual. Since the greatest resource of any nation is the productive energy of the people themselves, it follows that the conservation and development of that productive energy is the most constructive policy that any government can pursue. It also follows that the worst form of waste that any government could permit or encourage would be the waste of the productive energy of the people.

The repression of destructive and deceptive action. The first and most obvious thing which the government must do is to prohibit and prevent all the destructive and deceptive forms of conflict as outlined in Chapter V. He who has no moral scruples against pursuing his selfish interests by destructive or deceptive methods can be restrained only by the superior force of the many as it is exercised through the government. If he is allowed to pursue his selfish interests by these methods, he not only wastes his own powers in unproductive efforts but also tends to destroy the products of other people, and, what is more important, he discourages them from further productive effort and thus causes their productive powers to go to waste. It may therefore be said that, whatever other functions government may have, its primary function is to repress the destructive and deceptive methods of pursuing self-interest.

The repression of violence and fraud. The first effect of this repression of the destructive and deceptive methods is to transform the struggle for self-interest from the brutal struggle for existence, where the strong prey upon the weak and the ferocious upon the gentle, into a struggle wherein the persuasive and the productive triumph over the unpersuasive and the unproductive. In so far as competition can be made a rivalry in production, and success can be made to depend upon production, we shall be approaching a condition in which each and every one would succeed in getting what he wanted in exact proportion as he contributed to others what they wanted ; under which the most useful would be the most successful, and the indispensable man would be the great man. In

that situation we should have a literal fulfillment of the words "Whosoever will be chief among you, let him be your servant." And a servant is not necessarily one who comes at your beck and call to do your bidding; he may be merely the one who does you a service or who produces what you need.

It must not be hastily assumed that the repression by the government of the destructive and deceptive methods of acquiring possession of desirable things is merely negative work. By this kind of repression every producer is protected in the possession and enjoyment of the fruits of his own productive effort. Knowing that he will enjoy the full advantage of his own industry, enterprise, and foresight, he will have the strongest kind of motive for exercising these virtues to their full capacity. This lets loose the productive energy of the people in a way that would be impossible without the protection of law and government. The people can be trusted to take the initiative and start all sorts of productive enterprises if they are thus safeguarded.

There is nothing any more positive and constructive than the free spirit of a vigorous race of people when they are left to direct themselves in the field of production, but are restrained from entering the fields of destruction and deception. They can safely be intrusted with the task of looking after themselves if those who are criminally inclined can be prevented from interfering with them. Give the people confidence in the government and in one another, and their own productive virtues will develop, their industrial power will multiply itself, and the prosperity and power of the nation will be assured.

Confidence and economy. Confidence is one of the greatest of all economizers of human energy. Its greatest value is not in the stability which it brings to the financial market, though that is very important; it is found rather in the unshackling of enterprise which results from confidence in the government and in one's neighbors and fellow citizens. The average citizen has more points of contact with his neighbors, his associates in business, and his fellow citizens than with the government or the financial market. It is in these numerous points of contact, and in the vast sum of

these dealings of man with man, that confidence produces its greatest economies and lack of confidence its greatest waste.

Professor E. A. Ross, in his book entitled "The Changing Chinese," mentions certain bad neighborhoods in China where the farmer must guard his rice field every night to keep his crop from being destroyed or stolen. The energy that is wasted when so many people stay awake every night must be stupendous, but this waste is a trifling matter compared with the discouragement and lack of enterprise that result from the feeling of uncertainty which such lawless conditions beget. We save much energy by being able to sleep at night in confidence that the products of our labor will not disappear before morning.

Before we expend too much sympathy on those Chinese farmers we should consider the condition of the fruit growers, gardeners, and farmers in the neighborhood of some of our large towns who are frequently compelled to keep a watchman or else to expose the entire produce of their toil to the depredations of town marauders. The depredations of these marauders are especially disastrous to the family garden, where the owner cannot afford to hire a watchman and is himself engaged in other work which makes it necessary for him to sleep at night.

Observance of law a patriotic duty. There are two reasons for choosing the orchardist and the gardener as examples of producers who gain through a government and a community in which they have confidence. In the first place, it is obvious that these men are producers who contribute certain vital necessities to the prosperity and well-being of the whole community. In the second place, it ought to be easy for the average person to understand that any act of his which makes it uncertain as to whether or not the producer will reap the reward of his labor is an injury not only to the producer but to the consumer and to the whole nation as well.

Standardization and economy. Aside from police protection there are a few other important functions which law and government can perform better than private individuals or voluntary groups of individuals. One of the most important of these is the

standardizing of coins, weights, and measures. The economy involved in transferring coined money instead of uncoined metal is apparent. Coining the metal by a reliable and responsible government merely gives the public confidence in its weight and fineness. When it is once coined it can pass from hand to hand without the labor of inspection on the part of everyone who receives it. Otherwise the receiver would always have to weigh it to determine its quantity and test it to determine its quality. When it is coined it "sells" (if we may speak of selling money) on grade and reputation rather than on inspection. Confidence is what makes it sell on grade and reputation; lack of confidence would necessitate inspection,—that is, weighing and testing,—which would be very wasteful of time and labor.

Any other commodity may also sell on grade and reputation rather than on inspection, if it is properly standardized. This also would be economical and, as in the case of coin, would be a result of confidence. All civilized governments have done something toward standardizing weights and measures for determining quantity. In proportion as these standards are fixed and enforced by law we save time and energy in transferring goods. If it were possible to go farther and fix and enforce standards of quality as well as of quantity, still greater economies would be effected.

Individuals and firms have frequently succeeded in standardizing their goods, both as to quantity and as to quality, so effectively that buyers can buy on grade and reputation rather than on inspection. Most goods which are put up in standardized packages and always sold in this form are sold on grade and not on inspection. Whenever individuals and firms succeed in inspiring such a degree of confidence they generally increase the salability of their goods. They save the purchaser some time and trouble, and he is usually willing to pay something for that saving. Only the government, however, can enforce uniform standards among all producers and all dealers.

Standardization and specialization. When each individual can avoid the necessity of being expert in many things, and therefore has time to become a specialist in one thing, the general

efficiency of the whole nation is increased. One of the advantages of standardizing commodities is that the average consumer can save himself the trouble of being an expert buyer or an expert judge of the many things which he has to purchase. If he has confidence not only in the weights and measures but also in the alleged quality of the goods offered for sale, he may make his purchases with very little expenditure of time and strength and save his time and strength for his own special work.

The enforcement of contracts and agreements is another way of creating confidence and, through the creation of confidence, of economizing energy and encouraging production. Where men commonly regard contracts as scraps of paper and do not solemnly and completely fulfill them, and where law and government fail to compel their literal fulfillment, there will, of course, be great difficulty in working together in productive enterprises.

The exercise of authority. It is clear, therefore, that one very important function of government is to create that state of confidence which results in economy, and to create it, first, by repressing destruction and deception through the police power of the state; second, by standardizing products; and, third, by enforcing contracts. These tasks, which are necessary in the interest of the highest economy, are thrown upon the government because no other agency is in a position to perform them. They call for the exercise of authority, backed up by physical force, and that is a work which can be intrusted to no private agency.

We need not limit the functions of government, however, to those requiring the exercise of authority, although usually it will be found that the government is best fitted to perform those which require some degree of authority, whereas private individuals and organizations can usually be intrusted with those enterprises which can be carried out wholly on the basis of voluntary agreement. This distinction is not always clear, but a little careful study will usually reveal the fact that there is an element of compulsion in those enterprises which the government carries on most successfully. However, we need not hold to any hard-and-fast definition of the functions of government. It is sufficient to say that

anything is a proper task for the government if there is reasonable ground for believing that the government can do it better and more economically than private enterprise can reasonably be expected to do it. That reasonable ground exists in favor of government enterprise whenever authority or compulsion is necessary to its successful accomplishment. When there is no need whatever for compulsion—that is, when every part of the work, including the selling of the product, can be conducted on the voluntary basis of free contract—the general tendency is to leave the task to private enterprise.

Beneficent uses of power. There is a wide difference, however, between using force to compel a man to do something which he has voluntarily contracted to do and using it to compel him to do something which he has never agreed to do and would prefer not to do. As a matter of observation it will be found that most if not all of the things which the government is able to do well involve some element of compulsion of the latter kind. Public education will serve as an example. Wherever it is a success there is either compulsory attendance or compulsory support by taxation or a combination of both. In the lower grades of our public-school system we have both. In the higher grades and in our state colleges and universities we have compulsory support; that is, the taxing power of the government is used to procure the means for the payment of expenses. Both compulsory attendance upon the lower grades and compulsory support of all grades are beneficent uses of the physical power of the government over the individual; but it must be remembered that it *is* the use of physical power. There is no reason for believing that a government school on a purely voluntary basis would be superior to a private school; that is to say, if both attendance and payment were voluntary on the part of individuals, it is difficult to see how it could be more successfully managed by the government than by some private agency.

That which is true of public education appears to be true of every other enterprise upon which it would be possible for the government to enter. The government has no advantage over a

private individual or a voluntary association of individuals except in the use of force or compulsion; that is to say, any enterprise which can be carried on, on a purely voluntary basis, without any use of compulsion except in the enforcement of contracts which are themselves voluntarily entered into, can probably be fully as well managed by private individuals and associations as by the government; but if any degree of compulsion is necessary in order to insure its success, it becomes a subject for government enterprise. There is undoubtedly a large field for the beneficent exercise of compulsion. There is also a large field where freedom and voluntary agreements are better than compulsion. If we can locate the limits of the beneficent exercise of force we shall have located the limits to the beneficent exercise of government enterprise.

Human interests sometimes in conflict and sometimes in harmony. Human interests are frequently in conflict with one another. They are also frequently in harmony with one another. Where they are in conflict—that is, where one person's interest conflicts with that of another—there is likely to be trouble. Only three things can prevent uneconomic conflict; that is, conflict which is either destructive or deceptive. The first is the voluntary submission of the weaker person through fear. That results in despotism. The second is such moral self-restraint on the part of one or both as will prevent a quarrel. Willingness to give up not only one's coat but one's cloak also would preserve peace. The third is a strong and effective umpire who will promptly decide the case and enforce his decision upon both parties to the conflict. This umpire is the government.

It will generally be agreed, except by extreme anarchists, that wherever human interests come in conflict, a strong umpire of some kind will be necessary until men are so self-restrained by their morals or their religion as to govern themselves. Without such self-restraint the conflict of interests will result in the wasting of human life and energy by destructive combats, fights, and duels, unless there is a government at hand to settle the difference and send the disputants about their business.

Government control unnecessary where human interests are in harmony. But human interests are sometimes harmonious. When this is the case the individual who pursues his own interest is also promoting the interest of others. Within this field where interests are in harmony it is true, as Adam Smith said long ago, that we are sometimes led as by an invisible hand to promote the public interest while trying to promote our own.[1] It is to the interest of the farmer to grow good crops; it is likewise to the interest of the public to have him do so. In this and a vast multitude of other cases the individual needs no compulsion to lead him to promote the public good. In all such cases it seems to work better in the long run to leave the individual very much to himself. The wise government will generally keep its hands off.

Tendency of government officers to increase their own power and importance. There is, however, a natural tendency in all human beings to wish to magnify their own power and importance. This tendency seems to be peculiarly strong in that kind of person who manages to get elected to public office. Modesty is not the outstanding characteristic of the average candidate who seeks office, though he may feign it pretty well. The more the government undertakes, the greater becomes the power and importance of the officeholder. There is, therefore, a strong tendency on the part of all officeholders to extend the functions of government. The arguments in favor of this policy, as used by the *elected*, are sometimes so subtle as to deceive the very elect. They are always made as though in the interest of the people, though they are really in the interest of the officeholding class. It is a means of exalting the position of the vote getter. It therefore behooves the average citizen who has no ambition for public office to

[1] He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. . . . By directing his industry in such a manner as its produce may be of greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. . . . By pursuing his own interest he frequently promotes that of society more effectually than when he really intends to promote it. — "Wealth of Nations," Book IV, chap. ii

study very critically all arguments favoring the extension of the functions of the government.

The incompetent. There is, however, the problem of the people who are not competent to pursue intelligently either their own interest or the public interest. The feeble-minded, the insane, and the immature who have no natural guardians must of course have their interests looked after and cared for by the government. With them it is not a question of the conflict or harmony of their interests with those of the public; it is a question of their competence to pursue even their own interests intelligently.

The individual's wisdom is not increased suddenly when he is put into public office. Is anyone really competent to pursue his own interest intelligently? This question is sometimes asked by those who think that the government should look after us all. The statement that men are not competent to pursue their own interests does not furnish a very convincing argument in favor of general care and supervision by the government, for the reason that it goes too far. If no one is competent to look after his own interests, how can he possibly be competent to look after the interests of the rest of mankind? The officeholder is merely a man or a woman like the rest of us. If we are not able to look after ourselves, neither is he nor she able to look after himself or herself, much less to look after the rest of us.

Because of such considerations as these, the wisdom of mankind has for centuries moved toward the conclusion that government should confine itself mainly to the control of the field where individual interests come in conflict, leaving mature people of sound mind to govern themselves wherever and whenever their interests are harmonious. There are occasional reactionary tendencies toward more government interference, but these are usually encouraged by those whose ability lies in the direction of vote getting rather than by those whose ability consists in the power to do the useful and necessary things. It is no accident that talkers are frequently in favor of government regulation of everything except their own business of talking. They are generally opposed to any governmental interference with their own business.

EXERCISES

1. Why do we need law?

2. Why is it so important that law be definite and concise?

3. What forms of conflict must the government suppress?

4. Suppose that no one could succeed in life except in proportion as he did useful things, would that be a fulfillment of the words "Whosoever will be chief among you, let him be your servant"? Who is your servant?

5. What is the relation between confidence and economy?

6. What is the advantage of having money of standard quality? Would there be a similar advantage in standardizing other things?

7. Is every increase of power by the government necessarily good?

8. What are some of the things which every government must do if it is to promote prosperity?

9. Does a government tend to increase or to decrease its own authority? Why?

10. Do people who are at other times incompetent become suddenly competent when they go to the polls to vote?

11. If people are generally incapable of taking care of themselves, are they likely to be capable of electing officials who can take better care of them?

12. If the average man is incapable of taking care of himself, is the average government official likely to be capable of taking care of himself, to say nothing of taking care of the rest of the people?

CHAPTER VIII

MORALS AND RELIGION

It was suggested in a former chapter that the prosperity of a nation depended more upon the economizing and utilizing of its fund of human energy than upon any other factor, and that in consequence the most destructive forms of waste were those which wasted or dissipated portions of that fund. When a man's energy is going to waste, his life is going to waste, and he becomes a drain upon, rather than an addition to, the national strength. The following outline indicates some of the more familiar ways in which men go to waste.

- PEOPLE WHO GO TO WASTE
  - The idle
    - Involuntarily (the unemployed)
    - Voluntarily (the leisure class)
  - The ineffectively employed
    - Through lack of training
    - Through lack of opportunity
    - Through lack of initiative
  - The harmfully employed
    - Wasting their own energy
      - In vice
      - In dissipation
    - Wasting the energy of other people
      - By crime
      - By fraud
      - By luxury
      - By bad investing
      - By false teaching

For some of these forms of waste, law and government alone can furnish the remedy. Whenever force or compulsion is necessary and, at the same time, effective, government can and should use the force of positive law, supported by penalties. But there are many forms of waste which cannot be remedied by force or compulsion, at least not without causing greater waste of other kinds. To try to control by law such things as laziness, private vices, luxury, false teaching, and many other wasteful and harmful

tendencies would require an intolerable amount of espionage and meddling. The waste from espionage and meddling might easily overbalance the waste from the bad habits which the laws were trying to control. In all such cases we must fall back upon morals and religion to induce self-restraint and the voluntary adoption of sound habits.

Can morality be taught? There are two conflicting theories as to the results of moral teaching: one is that such results are generally negligible, because moral habits are the result of economic and social surroundings; the other is that man's moral nature may be so developed by teaching and example as to render it proof against bad economic and social conditions,—that these conditions are more likely to be the result than the cause of the moral habits of the people. The truth seems to be found in a combination of these two theories. We are undoubtedly influenced by our surroundings, but we can also by sheer force of character not only resist but even overcome and change our surroundings.

Weak characters are more largely controlled by their surroundings than are strong characters. Two men may go under a cold shower bath. One, being in vigorous health, comes out feeling refreshed. To him a cold shower is a favorable rather than an unfavorable condition. The other, being weak to begin with, comes out with a chill. To him it was an unfavorable rather than a favorable condition. Yet it was the same shower bath, with the same temperature. If one were studying jellyfish, one might find that they were the sport of such circumstances as the winds, the waves, the tides, and the ocean currents; but if one were studying sharks, one might, with equal certainty, find that they were independent of all such circumstances. Similarly, if one were studying human jellyfish, one might find them and their moral habits to be the result of their economic and social surroundings; but if one were studying human sharks, one might reach just the opposite conclusion.

The unemployed. If we begin with the involuntarily idle, that is, the unemployed, we shall find that many of them are the victims of circumstances which they lacked the strength to combat

successfully. Frequently the hostile circumstances have been such as no one could stand against. In other cases it was their own weakness or their own injurious habits which made these people unemployable. There is no doubt that better moral and religious teaching would have given them a moral brace and helped them to succeed. At any rate, the fact that they are now idle means that they are going to waste and are a drain upon, rather than a contribution to, the national prosperity, power, and greatness. Anything which can be done for future generations to reduce the number of such unemployable people will be a definite contribution to the strength of the nation. More moral vigor, sounder habits, and better training are apparently needed for our economic prosperity as well as for purely moral or religious reasons.

The leisure class. When we come to deal with the voluntarily idle—that is, with the leisure class—we are on more certain ground. It is in no sense their misfortune, it is their fault, that they are idle. It is not opportunity which they need; it is moral regeneration.

We must be careful, however, not to confuse the person who does not have to earn his living with the person who is idle. Many persons of independent means are doing work of the very highest utility to the nation and to the world. Scientific investigation, experimentation, invention, historical and literary study, agricultural and mechanical demonstration, political reform, and philanthropy have all been promoted by men and women who could afford to give their time to such things.

The leisure class, properly so called, includes only those who do little or nothing that is useful or productive, but give themselves over to mere self-enjoyment or self-cultivation. Whoever belongs to the leisure class as thus defined is a drain upon the wealth and prosperity of the nation. The nation is better off every time such a person leaves it, and is worse off every time such a person arrives. Since he does nothing useful, nothing is lost when he departs. His food and clothing at least are saved. His wealth, of course, remains behind even after he is gone from the world. The more such people there are in the nation in proportion to the

workers, the worse it is for the nation in the long run. The whole nation has to be supported by the labor of those who work. If all the people work, the task is lightened or else the people live better. If only a part of them work, the burden upon the workers is either heavier or else there is less produced and consequently less wealth.

Do idle consumers make a market for producers? It is sometimes argued, however, that a large number of consumers who are not themselves producers is necessary to make a market for the producers. An appearance of reasonableness is given to this argument by taking the case of a single product, say shoes, though any other product would do equally well. It is undoubtedly a good thing for the shoemakers to have a large number of consumers of shoes who are not themselves makers of shoes, provided the consumers have something to give in exchange for shoes. The more the consumers have which can be given in exchange for shoes, the more profitable it is likely to be for the shoemakers. If, however, many users of shoes are living wholly on accumulated wealth, they will have less to give in exchange for shoes than they would have if, in addition to their accumulated wealth, they were also producing or earning something. The more workers there are in other productive fields besides shoemaking, the more other things there will be to be given in exchange for shoes.

The foregoing argument can be repeated with respect to each and every industry or occupation. This merely brings us back to the general statement that the more workers and the fewer idlers there are in any nation, the more abundant will goods of all kinds become and the more rapidly will the nation advance in prosperity and power. Overproduction of everything is an impossibility.

Some are willing to grant, however, that it would be better economically if everyone would work than it would be if some wasted their time in idleness. After admitting this, it will be asked, nevertheless, Has not a man a right to remain idle if he has accumulated enough to support himself without further work? Assuming that he has earned his accumulation and has not secured it by inheriting it, by marrying it, or by a fortunate speculation

in land, there is something to be said for this contention. But he who does less well than he can, does ill. One who is still capable of doing useful work, and chooses not to do it, is certainly doing less well for his country than he might, even though he did well when he accumulated wealth.

Should men be allowed to accumulate wealth? But why rely upon morals and religion to prevent this form of waste or ill-doing? Why not prevent men from living in idleness by forbidding them to accumulate wealth, or by taking it away from them by law if they do so? If men are not allowed to accumulate wealth, they will then be encouraged to consume their incomes as they go along. Wasteful or luxurious consumption is quite as wasteful as idleness.

Here, then, is the dilemma. If men whose incomes are larger than necessary to support them and their families are not allowed to accumulate, they will consume more than is necessary or work less strenuously in the present. If, on the other hand, they are allowed to accumulate a part of their incomes, some of them will be able to accumulate so much that either they or their children may live without work at some time in the future. It is deemed better and more economical to encourage them to work hard and live economically in the present by allowing them to accumulate and then to appeal to them on moral and religious grounds not to waste their lives in idleness or useless self-amusement in the future.

Let us assume, by way of illustration, that two men, A and B, have equal incomes, and that their incomes are more than sufficient to maintain them and their families in efficient comfort. A consumes his entire income and never accumulates anything, while B consumes only a part of his income, investing the remainder in productive enterprises of various kinds. The over-consumption of A and his family is wasteful and accomplishes nothing for the community. What they consume over and above that which is necessary for efficient comfort is wasted so far as the rest of the country is concerned and might just as well have been burned or thrown into the sea, if that would have given

them any amusement or satisfaction. B's surplus, however, has gone into the expansion of industries and the increase of the productive power of the country. Up to this point B has done much better than A. Now let us assume that after a period of years B decides that he has worked long enough and that he will spend the rest of his life in sheer idleness or self-amusement. A, having accumulated nothing, cannot retire, but is compelled to go on working as long as he is able. From this point on, A is doing better than B. During their whole lives it is difficult to say which does the better, but the odds are slightly in favor of B. If, however, B can be persuaded not to remain idle, but to continue doing something useful, the advantage is decidedly with B.[1]

The ineffectively employed. Next in order after the idle, including both the unemployed and the leisure classes, we have to consider the ineffectively employed. By the ineffectively employed are meant all those who, through lack of training, lack of opportunity, or sheer lack of initiative, are now doing less useful work than they might have been doing had they had the proper training, opportunity, and initiative. These include men who are doing unskilled work who might have been doing skilled work, men doing skilled manual work who might have been doing expert mental work, or men doing routine mental work who might have been doing work requiring inventiveness, originality, and enterprise. The individual who remains less useful to the nation than he might be is not only doing himself an injury but is also injuring the nation.

The harmfully employed. One very good definition of a vice is that it is a habit which wastes or dissipates human energy. It should, perhaps, be distinguished from crime in that vice wastes one's own energy, whereas crime wastes not only one's own but that of other people besides. The use of drugs which merely excite or irritate the nerves, overindulgence in any kind of excitement beyond what is necessary for recreation, or even excessive devotion to sport may become a vice in this sense as truly as excessive eating or drinking.

[1] For a fuller discussion see the chapter on Luxury.

Luxury. Luxurious consumption can be controlled by authority and compulsion to a certain extent, but not wholly; that is to say, there are certain clear and undebatable forms of luxurious consumption, such as the use of alcohol and opium, which the government can safely prohibit, but much must be left to the discretion of the individual. There is a timeworn argument to the effect that luxurious expenditure gives employment to labor and thus benefits the poor. This is similar in principle to the theory that the destruction of property, say the burning of a building or the breaking of a window, gives employment to labor. The stupidity of this argument was never more clearly shown than by Frédéric Bastiat in his famous work entitled "Sophisms of Political Economy." He pictures a shopkeeper who is about to chastise a scapegrace son who has broken a pane of glass. Some sympathetic bystanders argue that the boy is really a public benefactor in that he has made work for the glazier, who will then have six francs, the cost of a new pane, to spend, and that the butcher, the baker, and others will share in the benefit.

Assuming that it becomes necessary to spend six francs in repairing the damage, if you mean to say that the accident brings in six francs to the glazier, and to that extent encourages his trade, I grant it fairly and frankly, and admit that you reason justly.

The glazier arrives, does his work, pockets his money, rubs his hands, and blesses the scapegrace son. That is what we see.

But if, by way of deduction, you come to conclude, as is too often done, that it is a good thing to break windows, that it makes money circulate, and that encouragement to trade in general is the result, I am obliged to cry, halt! Your theory stops at what we see, and takes no account of what we don't see.

We don't see that since our burgess has been obliged to spend his six francs on one thing, he can no longer spend them on another.

We don't see that if he had not this pane to replace, he would have replaced, for example, his shoes, which are down at the heels; or have placed a new book on his shelf. In short, he would have employed his six francs in a way in which he cannot employ them now. Let us see then how the account stands with trade in general. The pane being broken, the glazier's trade is benefited to the extent of six francs. That is what we see.

If the panes had not been broken, the shoemaker's or some other trade would have been encouraged to the extent of six francs. That is what we don't see. And if we take into account what we don't see, which is a negative fact, as well as what we do see, which is a positive fact, we shall discover that trade in general, or the aggregate of national industry, has no interest, one way or the other, whether windows are broken or not.

Let us see, again, how the account stands with Jacques Bonhomme. On the last hypothesis, that of the pane being broken, he spends six francs, and gets neither more nor less than he had before, namely, the use and enjoyment of a pane of glass. On the other hypothesis, namely, that the accident had not happened, he would have expended six francs on shoes, and would have had the enjoyment both of the shoes and the pane of glass.

Now as the good burgess, Jacques Bonhomme, constitutes a fraction of society at large, we are forced to conclude that society, taken in the aggregate, and after all accounts of labor and enjoyment have been squared, has lost the value of the pane which has been broken.

In one respect the argument against luxury is less strong than that against the breaking of a pane of glass, but in another respect it is stronger. When the shopkeeper in the story has to spend six francs on a pane of glass, he gets no satisfaction out of it and deprives himself of a pair of shoes which he needs. Had he spent the six francs on a luxury, he would presumably have got some enjoyment out of it, even though it had been followed by indigestion or a headache. To this extent it would have been better to have a luxury costing six francs than to have been compelled, through the carelessness of an overexuberant son, to spend that amount on a pane of glass. On the other hand, when one compares the expenditure of money for a luxury with the investment of money in tools or other instruments of production, one does not get so favorable a picture.

If you have a dollar to spend over and above what is necessary to maintain you in efficient comfort, you have your choice of spending it on some unnecessary article of consumption or of investing it in some productive enterprise. Whether it be a dollar or a hundred thousand dollars, the principle is the same. If you decide to invest your money in a productive enterprise, you tend,

to the extent of your investment, to set labor to work erecting the buildings or manufacturing the machines which will be needed in production. The more people there are who are investing in this way, and the more they invest, the more productive enterprises we shall have. This not only sets labor to work preparing the buildings and machinery but will continue to employ labor to run the enterprises. Again, as a result of this, more goods are produced and the nation is better fed, clothed, and supplied with all necessaries. It is, therefore, very much better that there should be a great many people investing their money productively than that they should merely spend their money for extravagant luxuries which are of no use to anyone except themselves. He therefore does badly who spends his money luxuriously when he might invest it productively.

Emulation in extravagance. Nothing could contribute more to the general prosperity and well-being of the nation than such moral habits as would discourage extravagant consumption and encourage thrift and wise investments in all sorts of productive enterprises. A particularly vicious and wasteful factor in many a social group is competition or emulation in extravagance. We have all doubtless heard of cases like that of the neighborhood that was bankrupted because one family got a new oriental rug and every other family immediately tried to outshine that one by purchasing something still more expensive, until, before long, each family was going into debt to keep up with its neighbors. Of all forms of competition, competitive consumption is the most pernicious and wasteful.

Emulation in the waste of physical energy. It is not only the possession of plenty of money which is thus vulgarly advertised. The possession of abounding physical energy is also advertised by the practice of conspicuous vices which tend to dissipate energy. The young man who can dissipate freely can thus advertise that he is rich in health and energy, just as a newly rich man, by spending money extravagantly, can advertise to the world that he has money to spare. When there is no sense of moral values and no sober self-restraint, the possession of abundant

health and the possession of abundant wealth lead to equally demoralizing vices. The poor are safeguarded by their poverty from the extravagant use of money, but they are quite as likely to indulge in the extravagant uses of vitality as are the rich. If there be any difference, the dissipation of physical energy is worse than the dissipation of money.

EXERCISES

1. What are the principal classes of people who go to waste?
2. Can morality be taught? Give your reasons.
3. Is a leisure class desirable?
4. Do idle consumers make a market for producers?
5. Would it cure idleness if men were forbidden to accumulate large wealth? Would it encourage extravagance?
6. In what sense is vice a form of waste?
7. Is luxury a vice? Does it help business?
8. Which is worse, to use money wastefully or to use one's strength and vitality wastefully?

PART TWO. ECONOMIZING LABOR

CHAPTER IX

THE DIVISION OF LABOR

As stated in Chapter I the primary factors in the production of wealth are the people and the geographical situation. What the people supply is labor, and it is very important that this labor be economized; that is, that it be so utilized as to make each and every unit of it produce as much as possible. It is economized chiefly, first, by its specialization; second, by its use of power other than that engendered in its own muscles; third, by the use of tools, machines, and equipment of all kinds; fourth, by the organization of business; and, fifth, by the balancing of all the factors of production. The subject of the present chapter is the division of labor, which is an older name for the specialization of labor.

Meaning of the division of labor. Adam Smith begins his great "Inquiry into the Nature and Causes of the Wealth of Nations" with a discussion of the division of labor. His statement of the case has scarcely been improved upon up to the present day, though many of his illustrations are out of date. By a division of labor he means, first, a system under which no one produces everything he needs, but each one confines himself to the production of that one thing or those few things for the production of which he is best fitted, exchanging his surplus product for the surplus products of others who are specializing on other things; second, the process of dividing the work involved in the making of a given article (each man performing some single operation) and then assembling all the parts, producing a complete whole.

Advantages. Adam Smith names three distinct advantages which result from the division of labor:

First, the improvement in the dexterity of the workman necessarily increases the quality of the work he can perform; and the division

of labor, by reducing every man's business to some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman. . . . Secondly, the advantage which is gained by saving the time commonly lost in passing from one sort of work to another, is much greater than we should at first view be apt to imagine it. It is impossible to pass very quickly from one kind of work to another that is carried on in a different place and with quite different tools. . . . Thirdly and lastly, everybody must be sensible how much labor is facilitated and abridged by the application of proper machinery. It is unnecessary to give any example. I shall only observe, therefore, that the invention of all those machines by which labor is so much facilitated and abridged, seems to have been originally owing to the division of labor. Men are much more likely to discover easier and readier methods of attaining any object, when the whole attention of their minds is directed toward that single object, than when it is dissipated among a great variety of things. But, in consequence of the division of labor, the whole of every man's attention comes naturally to be directed towards some one very simple object. It is naturally to be expected, therefore, that some one or other of those who are employed in each particular branch of labor should soon find out easier and readier methods of performing their own particular work, wherever the nature of it admits of such improvement. A great part of the machines made use of in those manufactures in which labor is most subdivided, were originally the invention of common workmen.[1]

Adam Smith's opinion that the third and last of these advantages was of special importance has been fully justified by subsequent experience. Machines have now taken the place of the simple tools of that day. Sometimes these machines are directed and fed by attendant laborers, but sometimes they are so perfected as to require very little attention, feeding themselves automatically and stopping automatically when anything goes wrong. In these cases the work of the attendant is reduced to a minimum, consisting merely in starting the machines and putting them in order when anything goes wrong.

There are penalties, however, to be paid for the extreme division of labor to which we have become accustomed. It is undoubtedly

[1] Wealth of Nations, chap. i.

efficient and economical; without it many articles which are now enjoyed by great masses of people would be so scarce as to be available only for the very few; but it puts a great strain upon the people who specialize. The ability to give close attention to one thing for a long time is not very widely distributed. Only the superior races possess it; and even within these races there are many people who lack it, especially in their early youth. They easily become discontented and restless if required to work under conditions of extreme specialization. They would be much better satisfied with more desultory work, even though such work accomplished less. This is one of the reasons why the quality of the people is such an important factor in national prosperity. A people who cannot stand specialized work will easily be left behind by a people who can.

Two kinds of division of labor. As suggested above, the division of labor takes on a somewhat different character when highly developed machinery comes into general use. This may be explained further by pointing out two kinds of division. One has been called contemporaneous division of labor and the other successive division of labor. Under the contemporaneous division of labor men are, at the same time, specializing in different lines of production. One group is producing, let us say, breadstuffs and bread, another meat, another textile fabrics and clothes, and so on, each group bringing some kind of raw material through the various stages of production until it matures into a finished product ready for consumption.[1]

Another phase of the contemporaneous division is found when different men are, at the same time, producing different parts of the same product, the parts being later assembled into a finished whole. Lumbermen are cutting the timber which eventually goes into a house, while men in the ore beds are getting out the iron ore which eventually goes into the house in the form of nails, and still other workmen are making the brick or quarrying the stone which will eventually go into the foundations and the chimneys.

[1] See Taussig, Wages and Capital, p. 6. New York, 1898.

Under the successive division of labor different sets of men are working on the same material, bringing it forward through the successive stages to maturity. Thus, following the choppers who fell the trees come the sawyers who saw them into rough boards, the carriers who transport the boards, the men in the planing mill who plane them, and so on, until the carpenters fit them into their places in the house. The iron ore goes through similar stages, as does every bit of material which enters into the final product.

The lengthening of the process. This lengthening out of the process of production, making it extend over a longer period of time, is one of the most striking characteristics of the era of machine production. It calls for more foresight, more planning for the distant future, more expenditure of labor and investing of capital long in advance of the consumption of goods, than was ever necessary or possible in any previous age. There is, therefore, under this régime, a greater demand than ever before for foresight, for thrift, for courageous investment, for the hazarding of large sums on the chance of gains in the distant future. There may be some connection between this fact and the fact that the large rewards, in our day, go to the men who exercise foresight, who invest courageously and wisely, who hazard their time and wealth on enterprises which look to the future.

Work done in different places. The contemporaneous division of labor has to do with space; that is, it involves the doing of different kinds of work in different places at the same time. This calls for the coördination of that labor and the exchange of products in order that each specialist or specialized group may get the advantage not only of its own efficiency but of that of other specialists and specialized groups. Where different workers are at the same time, but in different places, working on different parts of the same product, it is necessary that someone should coördinate their work. In a great automobile factory, for example, there are many different parts being produced simultaneously. In order that these parts may all be assembled and fitted together there must be very careful planning and organization. This is what is meant by the coördination of labor performed in different places.

The time element. The successive division of labor has to do with time; that is, it involves doing, at different times, by different men, different parts of the work of completing an article. In the same automobile factory the same piece of material is worked upon by many men in a regular order of succession. This calls for the coördination of labor performed at different times.

The lengthening out of the process of production in the whole of modern society makes this form of coördination peculiarly important. Its greatest importance, however, is found outside any individual factory. Before the automobile factory could be built, there must have been much work done in procuring the raw materials for the building and the machines, in producing food and clothing for laborers, and in doing a multitude of other things. Similarly, before shoes can be made, cattle must be raised, slaughtered, and their hides tanned; shoe factories must be erected and equipped with products from the mines and forests, and a vast amount of preparation must be made in other ways. The labor of the herdsman must be coördinated with that of the clerk in the shoe store, otherwise we should not have shoes as we now have them. Unless this coördination is brought about, the same man would have to kill the animal, skin it, tan the hide, and go through all the processes necessary to the finishing of a pair of shoes.

Territorial division of labor. In one of its broader aspects the contemporaneous division of labor is known as the territorial division of labor. This is what takes place when one region produces that for which it is best fitted, and exchanges its surplus for the surplus of other regions which are also specializing on those products for which they are best fitted. Thus, our Middle Western states of the upper Mississippi Valley produce hay, grain, and live stock, not only to supply bread, meat, and dairy products for themselves but for the rest of the country as well, besides sending a great deal abroad. The South grows cotton enough to supply the greater part of the world. Both regions receive in exchange for these farm products the manufactured products of the Eastern states and foreign countries and the mineral products of the mountain states and the upper regions of the Great Lakes.

Territorial division of labor and transportation. It is the territorial division of labor which gives rise to the important business of transporting goods from one region to another. Obviously, if one region should find it advantageous to produce everything needed or desired by its inhabitants, there would be no occasion for transporting goods into it. Similarly, if it did not produce a surplus of something or other which could be sold on an outside market, there would be no occasion for transporting goods outward. At the same time, the territorial division of labor is made possible by the transportation of goods and tends to grow in importance in proportion as transportation becomes cheaper and more efficient. A slight advantage in the exchange of products might easily be overcome by a heavy transportation cost. For example, even though New England cannot grow wheat so economically as Kansas or North Dakota, yet if the cost of transporting wheat over the intervening distance, and of transporting manufactured products back to pay for the wheat, were very high, New England might find it advantageous to grow her own wheat, and the states which now produce wheat might find it advantageous to do their own manufacturing.

The advantages of a territorial division of labor, where the transportation problem is easy, are similar to those which result from a division of labor among individuals in the same neighborhood. If it is profitable for each individual to specialize upon the work for which he is best fitted, it is equally profitable for each neighborhood to specialize.

In almost any neighborhood, however, there is some diversity of soil and natural resources as well as a diversity of talents among the people. Therefore it will seldom happen that a whole neighborhood, much less a whole region of considerable size, can profitably specialize upon a single product. It is more likely to happen that a whole neighborhood or region will find it advantageous to specialize upon a number of products. Thus, New England, the South, and the Corn Belt all produce a considerable variety of products, but each also finds it advantageous to import a considerable variety of other products. New England, for example, probably secures her bread and meat at less cost to herself

by devoting most of her energy to manufacturing and then exchanging her manufactured products for the wheat and beef of the West than she would if she tried to grow enough of these important food products on her own soil to feed all her people.

International division of labor. When the territories considered are not different sections of the same country but different countries, we have what is known as the international division of labor. Were it not for certain uneconomic factors which enter into the problems of national life and existence, everything which can be said in favor of a territorial division of labor and freedom of exchange within a country could also be said, and with equal force, in favor of an international division of labor. The chief of these uneconomic factors is the possibility of war. War is the greatest disturber of normal economic activities, and until it can be eliminated every nation must calculate upon its possibility and be prepared for it. In case of war a nation which is not prepared to produce all the necessaries of life, as well as all military supplies, may find itself helpless before a foreign enemy. Its only other hope would be to keep open the channels of commerce which connect it with outside sources of supply, but this is one of the things which the enemy country would try to prevent. Nitrates, for example, are, in the present state of science, necessary both for fertilizers and for explosives. A country which could neither produce its own nitrates nor manage to get a supply from abroad could not wage war for a very long time.

Adam Smith's remarks, quoted earlier in this chapter, regarding the way in which the minute division of labor has aided in the invention and improvement of machinery may be applied to the much greater problem of the development and improvement of a great and complex industrial system. When each workman spends all his time performing a single operation, it is much easier for him to devise a better way of doing it than it would be if he had to give his attention to many things. It is probable that no important and complicated machine was ever invented and made to work successfully without a great deal of trying out, modification, and general improvement. In actual use many weaknesses in the machine are revealed which no inventor, however wise, could have

foreseen and prevented. Even such a simple device as a bicycle passed through a long and interesting evolution before it reached a stage which made it generally useful and popular. The aëroplane is another illustration of gradual and detailed improvement after it was actually in use.

If it is impossible for any human intelligence to invent and construct at once a satisfactory machine, it would be obviously impossible to have invented and organized a whole industrial system. That would present an infinitely more difficult problem than the invention and construction of any machine that was ever built. It has been by age-long trial and error, variation and selection, experiment and failure, that even a tolerably successful industrial system has been worked out. There are doubtless endless improvements yet to be made, but they will certainly be made by the same process of gradual and piecemeal adjustment. Anyone who thinks that he can devise and organize a better system than the present shows, by the very fact that he thinks so, that he is unfitted for the task. He shows that he lacks the first element in fitness; namely, a knowledge of the vastness of the problem and the infinite number of difficulties to be overcome. It is different, however, with one who thinks of some detail in the present industrial system which might be improved. This presents a problem worthy of the greatest minds.

EXERCISES

1. What are the principal methods of economizing labor?
2. What is meant by the division of labor?
3. What are its chief advantages?
4. What are the two kinds of division of labor?
5. What is meant by the contemporaneous division of labor?
6. What is meant by the successive division of labor? What is its relation to thrift and foresight?
7. What is the relation of transportation to the territorial division of labor? What are its advantages?
8. What is meant by the international division of labor? What are some of its advantages and disadvantages?

CHAPTER X

POWER

One of the most effective ways of economizing labor is the use of other sources of power than man's own body. Physically he is not particularly strong, and if he had to rely upon his own bodily strength alone he could not accomplish very much.

Power needed for moving material objects. It has been pointed out many times that man's work, on the physical side at least, consists in moving material objects. For this work the first essential is power. The power first applied was, of course, that which was generated in his own body and exercised through his own muscles. But the secret of the industrial success of modern civilized nations lies in their command of other sources of power rather than in any superior muscularity of their own.

Importance of animal power. The first of these sources of power which man utilized on a large scale was that of animals which he domesticated and enslaved. They are still one of the most important sources, if not the most important source, of power. According to the *Yearbook of the United States Department of Agriculture*, there were on the farms of the United States on January 1, 1919, about 26,459,000 horses and mules, to say nothing of those in use in the cities and towns. The latest figures for horses and mules not on farms are those given in the census of 1910. On April 15 of that year there were 3,453,000. Assuming that there were as many in 1919, it would bring the total up to 29,912,000. Some of those on farms, of course, are colts too young to work. Those of working age, both on farms and not on farms, are probably close to 26,000,000. Besides horses and mules, a few oxen are still used. The "primary horse power"—that is, horse power in its original sense—used in manufacturing in the United States in 1914 was estimated at 22,547,574. It has been

increasing rapidly, so that by 1919 it was certainly much larger. It is not easy to compare the actual working power of a horse with that of the horse-power unit as used in measuring the power of a steam engine, but, assuming that they are equal, it would appear

WHERE POWER IS SUPPLIED BY HUMAN MUSCLES. RICE FARMING IN JAPAN

that the total animal power in use in the United States was, until recently, very nearly as great as the total steam and water power used in manufacturing.

Historical importance of the ox. The ox, from the most ancient times until quite recently, has been the chief if not the sole draft animal of all the races that have used draft animals at

all. His docility and patience, his great strength, the cheapness of his harness, and his ability to find his own living when not at work contributed to make him a most valuable assistant to man in his struggle for the conquest of the earth. In the pulling of the heavy wooden plows and harrows that were in use before the modern steel tools were invented, and of the lumbering carts that were in use before modern vehicles were constructed, he enabled men to cultivate the soil on a vastly more extensive scale than would have been possible by human muscles alone. He thus contributed to the production of food for increasing populations of men, and in the end he contributed his own body to help feed them and his own hide in order that they might be shod. In many parts of the world he is still the principal draft animal for farm work. If we take the whole history of man's use of power, it is probable that the ox has furnished more in the aggregate than any other agency, not excluding coal and steam.

Solar energy. The great physical source of power, so far as man has been able to develop it, is understood to be the sun. The amount of solar energy which comes to the earth in the form of light and heat is so stupendous as to bewilder the imagination. Its most important service is in the promotion of plant growth and, through plants, of animal growth; but it is also transformed into mechanical power in a number of ways.

In the first place, it vaporizes water, which then rises. When this water vapor reaches high altitudes and is congealed it falls in the form of rain, snow, etc. Some small fraction of it falls on mountains and other high portions of the earth's surface, whence it flows downward through the streams. These are harnessed and made to turn water wheels, thus furnishing mechanical power to do man's work; that is, to move pieces of matter.

In the second place, through plant growth combustible material is stored up in the bodies of trees and other plants, thus producing fuel. The accumulation and covering over of vast masses of combustible vegetable material in previous geological periods gave us our coal beds, which have recently become a principal source of both artificial heat and mechanical power. It is generally

supposed that petroleum is of animal origin. If so, it is, like coal, the product of solar energy.

In the third place, the direct rays of the sun may be so concentrated as to produce an intense heat, which may, in turn, be used to transform water into steam. According to tradition the great mathematician Archimedes burned the Roman ships which were besieging his native city of Syracuse by the use of a large number of mirrors. By reflecting the sun's rays from all these mirrors upon a single spot so much heat was concentrated as to set the ships on fire, one after another. Solar engines have lately been constructed which make use of converging mirrors for the concentration of the sun's rays. This produces an intense heat, which, in turn, converts water into steam.

Winds. In the next place, if we may assume that winds are in general caused by variations in temperature, they may be said to be derived from solar energy. This mechanical power, as used for the moving of boats, has been of the very greatest importance in the development of commerce and the spread of civilization. The epoch-making voyages of Columbus, as well as the voyages of great numbers of men less noteworthy than he, were made possible by the ingenuity with which man had learned to utilize this vast source of power. For certain kinds of stationary work which does not have to be performed regularly, such as pumping water, grinding grain, etc., the windmill has proved an economical device for utilizing the power of the winds.

Tides. Another source of power of which some use has been made is the tide. This can be traced to the momentum of the earth rather than to solar energy. The rising and the falling of the tides, especially along coasts with many inlets and estuaries, have created opportunities for tide mills which can be made to do certain kinds of work.

Sources of power in the distant future. With all these sources of power, and possibly others which may be developed, there is no likelihood that our ingenious race will ever be compelled to fall back upon its own muscles, or even to depend exclusively upon animal power. In that distant day when our coal beds and oil

A VERY EFFICIENT KIND OF POWER FOR FARMING. PREPARING THE SOIL FOR CORN IN ILLINOIS

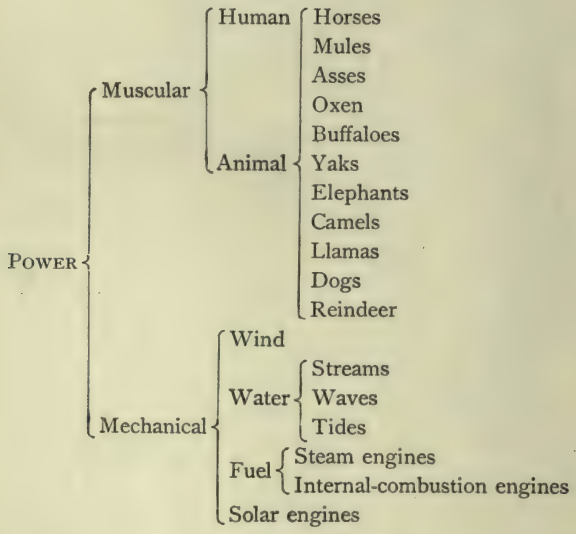
fields are exhausted, the sun's rays will still continue to strike the earth. That being the case, trees and other plants will still grow, though wood could scarcely take the place of coal and petroleum. Alcohol can scarcely become as cheap as gasoline has been in the past, but it can be manufactured in considerable quantities from a variety of plants. Again, the rains and the snows will continue to feed our rivers and turn our water wheels. Electrical transmission will enable us to utilize many streams now running idly to the sea and to distribute the power over wide areas and send it long distances from the streams. Solar engines may be so perfected as to enable us to utilize the inconceivable and inexhaustible flow of energy which comes to us in the form of direct rays from the sun. The winds will continue to blow and push our sails and turn our windmills. And so long as the earth continues to revolve about its axis the tides will continue to ebb and flow, and these may furnish us considerable quantities of power.

Even if it should happen that none of these sources, nor all of them combined, should furnish quite such cheap power as that which we now enjoy through the use of coal, still we may become so well to do, through improved agriculture, improved technical processes for utilizing power, and more rational habits of living, as to enable us to bear the extra cost of these other kinds of power with no great inconvenience. Even if this should not happen, it must not be forgotten that a considerable number of civilizations have been built up and multitudes of people have lived comfortably and happily with no power except that of their own muscles, their domestic animals, the winds, and the waterfalls.

The steam engine. Next to the yoking of the ox at some time in the prehistoric past the most momentous event in the history of man's use of power was the invention of the steam engine. The reason why this was so momentous was that the coal beds of the north temperate zone furnish a vast quantity of very cheap and very concentrated fuel. By merely vaporizing water in a boiler by means of this cheap fuel great pressure can be exerted. This pressure can be made to move a piston. From this point on, further developments are merely the results of mechanical adjustments.

AN IMPROVEMENT OVER HUMAN MUSCLES AS A SOURCE OF POWER

Whenever one object, such as a piston, can be made to move as we want it to move, other objects can be hitched to it and be made to move also. The first of these mechanical adjustments to produce great results was when the moving piston was made to turn a wheel, thus converting linear motion into circular motion. After that adjustment was made every form of steam-driven machinery became a mechanical possibility.



EXERCISES

1. In what does labor really consist?
2. Does this explain why power is needed?
3. What are the leading forms of power used as an aid to man?
4. What of the relative importance of animal and mechanical power?
5. What are the most important forms of animal power?
6. What are the most important sources of mechanical power?
7. What about the future: are our sources of power likely to be exhausted?
8. What have been some of the most important events in the history of man's use of power?

CHAPTER XI

CAPITAL

Instruments of production. Tools and machinery deserve a position next in importance to power as economizers of human labor. In fact, power and machinery are almost inseparable. An ingenious and enterprising people will not only develop many sources of power but will manage to invent and make more and more instruments and contrivances to aid in production or to enable a given amount of labor to produce more than it could possibly produce with fewer instruments. This great mass of engines, instruments, and contrivances not only aid greatly in production but they come also to form a very important part of the wealth of the nation. All wealth of this kind has come to be called producers' goods. All these and other producers' goods are called capital for short.

Producers' goods and consumers' goods. This great body of instruments of production is undoubtedly wealth in the sense that it is a means of increasing well-being. You can truthfully say of it, "More such instruments, more well-being for the nation; fewer of them, less well-being." But these instruments constitute a special kind of wealth. They do not satisfy our desires directly; they help to satisfy them indirectly by enabling us to get other things that do satisfy our desires directly. Those goods that satisfy desires directly are called consumers' goods. For example, plows, reaping machines, flour mills, and ovens are producers' goods; bread is consumers' goods.

Raw materials. Sometimes, however, an article which is ultimately destined for direct consumption, but is still in the state called raw material, is regarded as capital. Thus wheat, the inside part at least, is destined for the direct satisfaction of human desires when it is made into bread. But while it is still in the form

of wheat its owner does not expect to get any direct satisfaction from it, but to get some money for it, and with this money he may get some consumers' goods. He will regard his wheat as capital rather than as consumers' goods. Again, after it is made into flour, so long as the flour is in the hands of the miller, the dealer, or the commercial baker, it is not regarded by its owner as a means of direct satisfaction but as a means of getting an income. All these men will regard it as capital, along with the tools, machines, buildings, and other things used in the business.

What is capital? Capital may therefore be pretty broadly defined as any kind of property, aside from land, which a man uses in his business for the purpose of getting an income. Even a piano which the owner rents for an income and does not use for his own pleasure would be called capital.

Capital is goods. Let it always be remembered that capital is goods, not a quantity of money. Sometimes, however (in fact, usually), a man has to have money or purchasing power as a means of buying the engines, tools, instruments, machines, etc., which make up his capital. It is sometimes said, inaccurately, that he has transformed his money into these other things or that he has transformed one kind of capital into another. That is not true. He exchanged his money for them. There was no transformation. This inaccurate way of thinking has sometimes led to another inaccuracy; namely, that of thinking of capital as a lot of money or some kind of purchasing power. Capital is goods. Those goods have value or purchasing power, but the purchasing power is not the capital, it is only the value of the capital. One might as well say that since every man has weight or height therefore man *is* weight or height.

How wealth is measured. Another reason which leads erroneously to thinking of capital as a fund of value is found in the fact that capital, like all wealth, is measured in terms of value and its quantity expressed in terms of money. There is no good way of saying how much capital there is in any community or in the possession of any individual except by saying it in terms of money. If any capitalist were asked how much capital he possessed, and

he were to answer in terms of tons, or cubic feet, or yards, or any other unit of physical measurement, he would not convey any clear or definite idea. Therefore, if you ask any business man to state how much capital he uses in his business, he can only answer you intelligently by saying so many dollars or so many dollars' worth. This is a mere quantitative expression. If, however, you were to ask him in what his capital really consisted, he could only answer you intelligently by giving you an inventory of the various goods which make up his fund of capital. The only exception to this rule would be the money-lender, whose capital consists solely of money.

Capital the result of working and waiting. The next question to arise is, How does capital come into existence? If it consists of tools, buildings, machines, equipment, etc., it is rather obvious that they come into existence because labor is expended in producing them. But this does not tell the whole story. In order that any community may come into possession of a larger stock of tools and equipment, it must, temporarily at any rate, divert its labor force from the production of consumers' goods into the production of these producers' goods. Some labor must be put to work making tools, machines, buildings, equipment, etc., and just that much less labor will be available during that time for the production of consumers' goods. During this period the community will have fewer consumers' goods than it otherwise might have had. Of course, the expectation is that the tools and equipment, after they are produced and put to use, will again add to the total production. This, however, involves a certain amount of postponement of consumption.

In a society where things are done by free individuals working under the system of voluntary agreement, any individual may decide that he will consume a little less in the present or the immediate future in order that he may have a little more to consume in the distant future. The way he does this is to save and invest; that is, buy fewer consumers' goods in order that he may buy more producers' goods, or else to turn aside, as may have been done in very simple states of society, from the work of gathering consumers' goods in order to apply himself to the work of making tools.

Making tools rather than consumers' goods. A primitive fisherman has frequently been used as an illustration of this simple process. He has been in the habit of catching fish with very simple tackle, but he sees an opportunity of increasing his catch if he can only get some kind of boat, so he decides to spend a part of the time each day in making a boat instead of spending all his time catching fish. By this combination of frugality and industry he eventually comes into possession of a boat which thereafter adds to his income and more than compensates him for the frugality which he practiced during the period in which the boat was building. The case is doubtless real enough to serve as an illustration of the essential process of increasing the stock of capital.

Combination of work and thrift. It has not been many generations since farmers used very crude and simple implements, some of which they could make for themselves. The farmer who made his own plow was depriving himself of the opportunity for amusement, which is a kind of consumption, or was reducing somewhat his consumption of material goods during the period when the plow was being made. After it was finished it assisted him in producing subsistence and added to his income available for consumption. This is in all essential particulars similar to the case of the primitive fisherman.

A little later, however, the farmer, instead of making his own plow, hired a blacksmith to make it, paying the blacksmith money for his work. Here we have the same combination of labor and frugality as in the other cases, the difference being that in the making of the plow the blacksmith does the laboring and the farmer exercises the frugality. With the money which he paid for the plow he could have bought consumers' goods and had immediate enjoyment. He postponed that enjoyment when he paid the money to the blacksmith and received the plow. In the then distant future, however, the plow added to his income and enabled him to make up for the loss of opportunity for immediate consumption and thus compensated him for the postponement which he underwent when he purchased the plow.

Investing, or buying producers' goods instead of consumers' goods. The modern farmer, however, instead of hiring the blacksmith to make the plow usually buys his plow ready made. So far as he is concerned the act of frugality is the same as though he deliberately hired the blacksmith to make it. He surrenders a certain amount of ready cash with which he might have bought consumers' goods; he receives the plow, which for a period of years will add to his income and therefore compensate him.

In the making of the plow, however, there were other tools used as well as labor. Those other tools had been made in much the same way as the plow. Someone had invested money in them and then hired other labor to use the tools in the making of the plow. It has become, therefore, a very complicated process; but anyone who will analyze the process will find always the same two factors involved; namely, waiting and working—postponement of consumption on the one hand, labor on the other. No capital can ever come into existence without this combination. The fact that this combination always exists may be obscured by the intricacies of the modern industrial process, and it may require a little more intelligence and study to see clearly where and how the frugality and the labor are combined than are necessary when studying the primitive fisherman or the old-fashioned farmer.

Separation of the functions of working and waiting. In the highly complicated industrial system of the present, with its increase of specialization, the two functions of waiting and working are generally performed by different persons and classes of persons. This has given rise to some of the most intricate and most difficult of our social problems. The small farmer, for example, who owns his own land and his own teams and farming outfit, and who does his own work, combines both functions. When he bought his team and outfit out of his own savings, he had to give up, for the present, the means of buying consumers' goods; that is, he had to wait for his consumer's enjoyment until the outfit should begin to earn him something. If, however, he hires someone else to do his work, there is a separation of functions.

In a simpler state, in which the same individual exercised both functions, no social or class antagonisms were developed. Even in the intermediate stage, when the farmer bought his plow from the blacksmith and then used it himself and the blacksmith bought his own tools and used them himself, we find both functions performed by the same individuals. Class antagonisms could hardly develop under these conditions. But when, as in the modern industrial system, the capitalist, especially if he be a large capitalist, lives mainly from the income of his capital and the laborer mainly from the income of his labor (in other words, when the two functions are sharply separated), class feeling and class antagonism have developed. It has come about in our urban industries that the average person who performs manual labor receives his wages in weekly installments and spends them mainly for consumers' goods, whereas the very tools with which he works are owned by other men who have specialized in the function of investing their money; that is, in buying capital, or tools and equipment.

Separation of the function of the laborer and the capitalist. Capital has existed, of course, as long as tools and equipment have existed, but this separation of the two functions, that of the laborer and that of the capitalist, has become general only since the rise of machine production. Before that time the function of the capitalist was not important enough to create an opportunity for many men to live exclusively by the performance of this function. Not enough capital was needed in the primitive forms of industry which preceded the present forms to enable a large number of men to live on its earnings.

It is this fact which is probably meant when it is erroneously stated that capital in the modern sense came into existence with the rise of machinery. Capital in the modern sense does not differ from capital in the former, or capital in the ancient, sense; it differs only in the sense that there is more of it and that much more is needed. This combination of facts—the fact that more of it is needed than ever before and that there is more of it supplied than ever before—has created what we call the capitalist class in modern industry, and that is a matter of importance.

Coördinating labor which is performed at different times. In a somewhat special but very important sense we may say that the function of the investor is to aid in production by coördinating labor which is performed at different times. In the chapter on The Division of Labor it was pointed out that there are two distinct forms of the division of labor; namely, the contemporaneous and the successive. Under our modern industrial system the successive division of labor has been greatly lengthened out. In some cases many years elapse between the beginning of a process and the final completion of the production of a consumable article, as when mines are opened, ore smelted, factories built and equipped, long before we can begin to enjoy the products of the factories. There is a striking analogy between the lengthening out of the successive division of labor and the widening out of the contemporaneous division of labor. The latter has been brought about through improved means of communication and transportation. It is literally true at the present time that thousands of miles or even half the earth's circumference may separate men who are working for the production of the same article. The coördination of labor performed at such widely separated points of space is one of the most important and striking aspects of the modern industrial system. It is, however, no more important or striking than the similar coördination which has taken place between labor performed at widely separated points of time. Anyone who cares to investigate this needs only to find out how long ago the mills were built in which the flour was ground which entered into the bread which he ate for dinner, or the factories in which his clothes or his shoes were manufactured. Even the hides from which his shoes are made grew on animals that were born several years ago.

There are various ways in which this coördination of labor performed at different times may be presented to the mind. In a primitive state of industry each unit of labor was performed by men working with few and simple tools. The tools may be said to represent labor performed in previous times. When the worker uses tools, his work in the present time is coördinated with the work of the man who made the tools. But since the tools were

very few and simple, it would be correct to say that a given unit of present labor was being coördinated with a very small amount of past labor.

Under modern conditions the average laborer is using more tools, as well as larger and more complicated machinery, than were used by the primitive laborer. These large and complicated machines, like the primitive tools, represent labor performed at a previous time. The labor of the workmen using them is literally being coördinated with the labor of the men who made the machines. Since the tools are so numerous, costly, and complicated, it is correct to say that a given unit of present labor is being coördinated with a large amount of past labor.

Lengthening the process of production. In order that there may be factories, mines must be opened and ore extracted. Ore must then be smelted and purified into iron and steel and made into machinery. But no one wants machinery for its own sake, any more than he wants ore or pig iron. Machines are wanted only as they will help to produce things desirable for their own sake. It is this constant looking ahead and taking thought for the future, accompanied by the postponing of present consumption in favor of future consumption, that makes possible the coördination of labor performed at different times.

Combination of factors. Something more than frugality, thrift, and foresight are necessary, however. Without mechanical ingenuity, however frugal, thrifty, and farsighted a person might be, he would find it difficult to exercise these qualities profitably. Unless someone were able to invent superior methods of production which required the exercise of those qualities, they would be of comparatively little economic advantage to those who possessed them.

Here we have an example of a class of cases which continually perplex the amateur student of economics. There are cases where two or more factors are absolutely necessary to get a given result. Fundamentally the problem is no more obscure than that involved in the formula $2 \times 3 = 6$. The students will agree that 2 is just as essential as 3, and 3 as essential as 2, in getting 6.

In the higher realms of economics we find numerous examples of the same problem. Forethought and inventiveness are examples of mental qualities which are combined to secure mechanical progress. However inventive men may be in contriving mechanical improvements, unless someone is willing to perform labor long in advance of any useful result, or pay someone else for performing that labor, all these mechanical contrivances will remain either in the brains of the inventors or in museums.

The productivity of capital. There are some extreme socialists who deny that the capitalist performs any necessary function. If that were true, it would be hard to frame an argument to show that society as a whole should do precisely what the capitalist is doing. The socialist would then have to admit that the capitalist, instead of performing a useless function, performs a most important one,—so important that society as a whole should take it over. To say that society should do its own investing is to say that it should become its own capitalist. This would present a question to be debated. The question would be, Can the useful function of coördinating labor performed at different times be done more economically and satisfactorily by the community than by private individuals?

EXERCISES

1. What is the difference between producers' goods and consumers' goods?
2. Are producers' goods growing in volume and importance? Why?
3. What is capital?
4. Why is capital sometimes spoken of as though it were money?
5. How does capital come into existence?
6. Would our stock of tools and machinery increase unless some of us were thrifty enough to buy them instead of spending all our money for consumers' goods?
7. In what sense does the buyer of producers' goods help in the successive division of labor as described in Chapter IX?
8. What is meant by lengthening the process of production?
9. What is meant by the productivity of capital?

CHAPTER XII

THE ORGANIZATION OF BUSINESS

Large capital necessary. The growth of machine production has made necessary such large aggregations of capital as to require the combined accumulations of numbers of men. In comparatively few cases does a single individual possess enough wealth to equip a modern factory, railroad, steamship company, mine, or even a large mercantile house. Were it not possible to combine the wealth of a number of individuals, large-scale production would be the privilege of only a few very wealthy men.

Methods of combining capital. There are three distinct methods of combining wealth in business: one is known as the partnership; another is the corporation, or joint-stock company; and the third is the coöperative society. The partnership is a simple combination of two or more individuals in the ownership and management of a given business, in which each partner is fully responsible for the acts and liabilities of the group. The partnership is merely an enlargement of the individual. The individual who owns and operates his own business is, of course, fully responsible for all debts and obligations, and, subject to bankruptcy and homestead laws, all his property may be taken in payment of any obligation incurred in the business. Where two or more men join together in a partnership each partner is responsible in the same sense and to the same extent as he would be if he were the sole owner.

Difficulties of partnership. Obviously a partnership on these terms is possible only among men who are very intimately acquainted with one another and who have complete confidence in one another. Since each partner is fully responsible for the acts of every other, so far as they are concerned with the business, it would be extremely hazardous, not to say foolhardy, for anyone

to form a partnership with an individual with whom he was not intimately acquainted and concerning whose honesty and ability he had the slightest suspicion. Incompetent or dishonest partners have caused the financial ruin of many an otherwise sound and capable business man.

The corporation. The modern expansion of business would hardly have been possible without some form of organization which would permit the association of larger numbers of men than are possible under a partnership. This has given rise to the corporation, or the joint-stock company. The distinguishing difference between the corporation and the partnership lies in what is known as limited liability. In a corporation the liability of each shareholder is strictly limited. The corporation may become bankrupt, but the individual members or shareholders can be called upon only for definite sums to make good the debts of the corporation. In the ordinary case each individual puts a certain sum of money into the fund. This may be lost, but he cannot be called upon for additional sums to make good further losses. In other cases, such as our national banks, the shareholder may not only lose what he put into the fund but may be assessed an equal amount in addition. This is sometimes called double liability.

Suppose, for example, it were considered necessary to have $100,000 of capital with which to start a business. This capital may be divided into a thousand shares of $100 each. (A larger number of shares of smaller denomination or smaller number of larger denomination may, of course, be decided upon.) These shares are represented by bits of printed paper which serve as evidence to show that the money has been put into the fund. A thousand different individuals may buy one share each, or a smaller number may each buy a different number of shares.

For each $100 which any individual puts in, he receives one of these bits of paper, which come to be called shares or stock certificates or some other such name. After the shares are all sold, there is the fund of $100,000 in money available for starting the business.

The general rule is that each contributor shall have a vote for each share which he has purchased. It would therefore be possible for one individual to own more than half the shares, provided he had invested more than $50,000 in the enterprise. Owning more than half the shares, he could always cast the majority vote and control the corporation, electing himself and his particular friends to all the offices, and virtually controlling the business. In some cases, however, such a concentration of ownership is not permitted.

Limited liability. Only the officers of the corporation are empowered to act for the corporation; the individual shareholder who is not an officer has no power to obligate the corporation in any way. One therefore does not need to scrutinize the solvency or the character of his fellow shareholders as closely as would be necessary in a partnership. Again, the individual shareholder has no responsibility for the acts of the corporation beyond that which has already been indicated; that is, if the business fails, the affairs of the corporation may be wound up, but he can lose only the sum which he originally subscribed, or, in the case of double liability, that sum plus an equal sum.

Some weaknesses of the corporation. This device of the joint-stock company with limited liability has made possible the bringing together of vast sums of capital running up into millions and hundreds of millions of dollars, for the purpose of carrying on great business enterprises. Individuals who never saw or heard of one another, living in different parts of the country, sometimes in different parts of the world, may own shares in the same corporation, having contributed their money to the joint fund for the purchase of the capital needed in the business.

This has been one of the great factors in building up modern industry. It is almost as important as some of the great mechanical inventions. But, like all great inventions, it carries with it certain difficulties. For example, it has made individual enterprise a practical impossibility, except in those cases where small-scale production is as efficient as large-scale production. On the other hand, it has given individuals with only small sums of capital to

invest the opportunity to participate in the profits of large-scale production. In the latter sense it has been a democratic institution. The fact, however, that individuals vote in proportion to the number of shares which they own has tended to destroy some of the democracy and, in some cases at least, to put the management of the corporation into the hands of a plutocratic oligarchy. A few large shareholders, who control the majority of the stock, can control the corporation sometimes even to the disadvantage of the small shareholders. Various limitations upon the voting power have been proposed and adopted for the purpose of limiting the power of the large shareholders. In spite of these, however, many a fortune has been built up in the past through the scheming of large shareholders.

Multiplied power and divided responsibility. In any large body of men, whether it be a mob or a corporation, if the members are all moved by a common impulse they are likely to have a sense of power proportionate to their numbers, and at the same time the very fact of numbers diminishes each man's sense of responsibility. That is why the mob is so like a monster, for the difference between a man and a monster is precisely that,—the monster feels a sense of power and not a sense of responsibility.

Something of the same kind exists in the case of the industrial corporation. There also you have increased power and diminished responsibility. Most of the evils of corporation practice grow out of this simple situation, and the remedy must be applied at this point. The sense of responsibility must be made commensurate with the sense of power.

Size a matter of importance. If the principle we have laid down is sound, it furnishes no support to the view that the mere bigness of a corporation is not a matter for the law to take into account. From our point of view bigness is an important factor in the problem, for the bigger the corporation the greater its power and the less the sense of responsibility on the part of each member. That situation alone calls more and more for strict regulation and enforcement of responsibility. Its increased power is a good thing, provided that power be used for production and not for

destruction; but there is no certainty that it will be used exclusively for production unless it is subject to the strictest control.

This does not mean that large corporations have worse dispositions than small, or that their members are worse men than the members of small corporations or partnerships. It means only that the disproportion between power and responsibility increases with the size of the corporation.

As a homely illustration of the importance of size, let us take the common house cat, whose diminutive size makes her a safe inmate of our households in spite of her playful disposition and her liking for animal food. If, without the slightest change of character or disposition, she were suddenly enlarged to the dimensions of a tiger, we should at least want her to be muzzled and to have her claws trimmed; while if she were to assume the dimensions of a mastodon, I doubt if any of us would want to live in the same house with her. And it would be useless to argue that her nature had not changed, that she was just as amiable as ever, and no more carnivorous than she always had been. Nor would it convince us to be told that her productivity had greatly increased and that she could now catch more mice in a minute than she formerly could in a week. We should be afraid lest, in her large-scale mouse-catching, she might not always discriminate between us and mice.

Stratification of society. There is another problem, not strictly a corporation problem, but a social problem growing out of the prevalence of the corporate form of industrial organization. That is the problem of the widening gap between employers and employed or, more strictly, between capitalists and laborers. It may be laid down as a general social law that anything which separates people into sharply distinguishable groups, whether it be a geographical boundary, a racial difference, a difference of religious creeds, or a class distinction, will produce, between the groups thus separated, first ignorance of one another, then suspicion growing out of that ignorance, then misunderstanding growing out of that ignorance and suspicion, and finally open warfare whenever a pretext is found; whereas anything which bridges over these gaps, or brings people together

regularly and normally, creates, first, knowledge of one another, then confidence instead of suspicion, then understanding instead of misunderstanding, and finally lasting peace because no difficulty seems large enough to serve as a pretext for war.

Now the joint-stock form of organization, though a most effective industrial device, has had at least one serious social result: it has widened somewhat the gap which would otherwise have existed between the employing group and the employed group. When employers are known as persons having Christian names, and can come in some kind of personal or direct contact with employees, and when, therefore, employer and employee know something about one another, there can be no such degree of suspicion of one another as now exists; where ignorance disappears, suspicion tends to disappear also. But when employers stand, as the shareholders of a corporation, in a purely impersonal relation to employees, when the average employer or shareholder knows nothing personal about the laborers, and the laborers know nothing about the shareholding employers, there is on either side of the line about as great a degree of ignorance of those on the other side as can be found anywhere in modern social life.

Widening the gap between social classes. Such a state of things has never failed in the history of the world to produce suspicion, jealousy, misunderstanding, and, on the slightest pretext, open hostility; and, so far as we are able to see into the future, there is not the slightest ground for hoping that such a condition ever will fail to produce these same undesirable results. In other words, we need not hope for social peace, or for stopping the conflict of classes, until that chasm is in some way bridged over or made to disappear.

This result can hardly be achieved by doing away with joint-stock corporations. They are so effective as industrial devices that we could scarcely get along without them; nevertheless, if we are ever to have anything resembling social peace, some way must be found to bring the employing classes and the employed into personal relationships one with another. The ideal is undoubtedly that of having the workers in our industrial establishments purchase

the stock of the corporations. If that result could possibly be achieved, there would be an end of the present phase of warfare.

The trust. It is important that we distinguish between the corporation, as we have just described it, and the *trust*, or *combine*. The corporation is an organization of individuals who put their capital together in order to carry on a business which requires more capital than is likely to be possessed by any one of them. The trust, or combine, is mainly an organization of corporations (though it may include also a few individual capitalists), for the purpose of controlling the market. While such organizations are to be distinguished sharply from corporations as such, nevertheless they could scarcely have come into existence if the corporation had not preceded them and prepared the way. They may therefore be called extreme developments of the corporation idea, though not necessary developments. As to these extreme developments of the corporation principle, it is becoming more and more apparent that their power for evil lies wholly in their power of controlling and manipulating prices. If that power could be taken out of their hands, we should then have nothing to fear from them.

Control of prices. If they could not succeed and survive in competition through their power over prices, they could then succeed only through their power of production. If they should then survive, the mere fact of their survival would prove their fitness to survive. This has been pointed out many times by scholars; but the practical politicians, with their unerring instinct for the wrong way, have ignored it and have been trying various hard and useless methods of dealing with the problem. Eventually, after having tried every possible way of going wrong, we shall apply the simple and direct remedy of government control of prices wherever a monopoly exists.

It is not necessary to indulge in any sentimental rhapsodies on the subject of the people and their control over affairs of this kind. Government affairs are controlled by politicians, and politicians are no more interested in the people than are the trust magnates themselves. The choice is a hard one. But where competition fails to regulate prices, these prices are certain to be fixed

arbitrarily by someone. In the absence of government control they are fixed by the trust operators alone. Where there is government control, they are fixed partly by the politicians and partly by the trust operators. The interests of these two groups are not the same, and, as the result of their pulling and hauling, prices will not be fixed quite so completely in the interest of either group, but more in the interest of the people, than if the prices were fixed by either group alone. The people can exercise a partial control over the trusts by refusing to buy from them, and over the politicians by refusing to vote for them. Through both methods of control the interests of the people will be somewhat better safeguarded than through either method alone.

Incidentally this would destroy most of the trusts. No trust exists by virtue of its superior productive powers. Each one depends for its existence upon its superior power in buying or selling; that is, upon its power over prices. Take away this power, and enable the outside concerns to match their productivity with that of the trust, and outside competition will increase and force the trust to break up into its most efficient *productive* units, as distinguished from the most efficient *bargaining* units.

The coöperative society. It has often been proposed to substitute a radically different form of business organization for the corporation, or joint-stock company. This is known as the cooperative society. In a sense the corporation itself is coöperative, but it differs from the coöperative society in two fundamental characteristics: In the first place, the corporation involves coöperation among the owners, whereas the true coöperative society involves coöperation among the workers. In the chapter on Capital we saw that the rise of modern industrial conditions had brought about a sharp separation of owners and workers. In the original form of manufacturing—that is, the small shop, where the workman owned the shop and the tools—we had the functions of ownership and of labor combined in the same individual. With the rise of the factory system these two functions were separated. The corporation represents the organization of owners and maintains the separation of owners from workers. The coöperative society, on the other

hand, represents an association of workers. Under the corporation, ownership and management go together; under the coöperative society, labor and management go together. In the second place, in a corporation, as we have seen, the various individuals who contribute capital vote in proportion to the number of shares which they own. In a coöperative society each individual has one vote, regardless of the number of shares which he owns or the amount of capital which he has put in. One man one vote is the rule here, whereas one share one vote is the rule of the corporation.

As to the comparative merits of these two forms of organization, the opinion of the world is somewhat divided. It must be admitted that the corporation has had much the larger growth, though in recent years the coöperative society has been gaining ground rapidly.

Comparative merits of the corporation and the coöperative society. It is the opinion of the present writer that the question will always be decided on rather definite economic grounds. Where the difficult problem is that of getting sufficient capital, he who supplies the capital must be given control; that is to say, where everything else is easily obtainable, where there are always plenty of laborers seeking employment, plenty of raw material to be had, and buyers ready to buy the finished product, but where the limiting factor is capital and the puzzling thing is to know where to get capital, favorable terms must be offered to the capitalist and he must be allowed to have his way, otherwise the capital cannot be secured. In the early stages of manufacturing expansion capital was the limiting factor.

The limiting factor will dominate. Now and then conditions arise under which capital is not the limiting factor. Among farmers, for example, where a creamery is needed, it is never very difficult to raise capital enough to equip the creamery; the difficulty is to get business,—that is, to get the farmers to produce the milk for the creamery. In these cases the producer of milk must be placated and persuaded to join the organization. He must therefore be given control. This gives rise to what is known as the coöperative creamery, in which the producing farmers own the plant, direct

its management, and share in its profits. Such a creamery, however, is coöperative only in a special sense. The men who work in the creamery are employed as other laborers would be employed in a privately owned factory of any kind.

A coöperative store is dependent upon custom. It is easier to get capital and to hire clerks and salesmen than it is to induce people to trade at the store. Therefore the patrons of the store must be given some control.

The great coöperative societies, as pointed out in the chapter on Coöperation, have been societies where coöperative buying and selling were substituted for competitive buying and selling; that is, they have been mercantile societies. They do not represent cooperation among producers or among the workers in the stores and factories, for the workers in the stores and factories are hired on the same terms as workers in the privately owned or corporation-owned stores and factories.

There are a few cases of real coöperation, but they are not very conspicuous. The only real coöperation is coöperation among workers, where the men who do the work in a factory manage it themselves or direct its management and furnish or hire the capital. This form of coöperation has not yet proved very successful, mainly because labor has seldom been the limiting factor. It is generally so easy to get labor that the laborer does not have to be given much control. When the time comes, as it probably will, when labor is scarce and hard to find, when it is harder to persuade the laborer to work than to persuade the capitalist to invest or the purchaser to buy the finished products,—then we may expect that this form of coöperation will gain ground.

Control by the indispensable person. Generally speaking, the indispensable man, whether he be the one who furnishes capital, the one who furnishes raw material (as in the case of the coöperative creamery), the one who buys the finished product (as in the case of the coöperative store), or the one who supplies the labor (as in the case of the true coöperative society), is in so strong a position that he can dictate terms to all the others. When the laborer becomes so indispensable—that is, so scarce

and hard to find that the average business enterprise must wait on his will—he will be in so strong a position that he can bargain on equal terms with all the others who participate in the enterprise. He will then, without resort to force, really have a part in directing its management on a purely voluntary basis.

There is not a very good prospect for coöperation among laborers under any other conditions. There is a strong probability that, with the rapid accumulation of capital (especially if habits of frugality and saving are encouraged), there will come a time when capital will be in danger of unemployment because of its great abundance, and every individual laborer will become almost indispensable because of the scarcity of labor. Then we must expect that capital will lose the power to direct exclusively the management of industries and will take the position of a hireling. The laborer will then gain control and assume the position of the master.

EXERCISES

1. Why is it necessary to combine the wealth of large numbers of men in modern business?
2. What are the principal methods of combining this wealth?
3. What are the disadvantages of the partnership?
4. Would it be possible for several hundred or several thousand men to work together in a partnership? Why not?
5. How does a corporation differ from a partnership?
6. What are the advantages of the corporation?
7. What is meant by limited liability?
8. What is meant by a trust? What is its purpose?
9. How does a coöperative society differ from a joint-stock corporation?
10. What are the comparative merits of the corporation and the coöperative society?

CHAPTER XIII

THE ECONOMICAL USE OF LABOR ON LAND

Fertility and location. Land is, of course, one of the original and fundamental necessities of national life. Some of the most necessary qualities of land, however, are as free as air and sunlight. Land, for example, must possess a certain degree of solidity to support ourselves and our buildings, but one can find solid land almost anywhere and most of it can be had free of charge. It is necessary also to have room, but we can get plenty of room without having to pay for it. Fertility, however, is limited, and the most fertile lands are very scarce. Therefore, if we want land of the most fertile kind we are likely to find that a good many others want it also and that we shall have to bid against them if we are to get it. Some land is better located than the rest, and land in the best location is so scarce that we have to outbid a good many others if we are to get it.

Since there are so many grades of land, from the standpoint of fertility and of location, it follows that land has no uniform value, but each piece has a value of its own, depending upon these two qualities. There is plenty of land so poor in these two qualities that you can get it for little or nothing. Some is so desirable, with respect to one or both of these qualities, as to give it an almost fabulous value. The differences in the value of lands within a city are due almost wholly to differences in location. In agricultural communities location is a factor, but not the only nor the most important factor, in determining land values. Nearness to market or to railroads, the character of the wagon roads, accessibility to schools and other social advantages, count for much; but the character of the soil and the subsoil, the climate, the moisture, and the other factors which determine plant growth count far more. All these factors which promote plant growth may

be grouped under the name "fertility." In that case we may say that, from an economic point of view, location and fertility are the most important properties of agricultural land.

Good location saves transportation. When we look for the reason why location is a matter of such importance, we must recall the fact that man's chief work, on the physical side, is the moving of materials. It is this which requires power; and power is costly, whether it be generated in the human body and exercised through the muscles, or whether it be developed in the bodies of animals or through mechanical agents. One very important phase of the work of moving materials is that of marketing products. The nearer a body of land is to a market, and the better the means of transportation, the less labor and power it takes to get its products to market. On land which is well located with respect to markets it is therefore possible to utilize labor more efficiently than on land which is badly located.

It is also costly to move man himself. It is therefore advantageous that he should live in close proximity to his work. If he lives far away, the cost of transportation is greater, and the labor force of the community is less efficiently applied, than if he lives close by. Even though the trolley fare is the same for a long as for a short distance, transportation costs the community more over the long distance. In the first place, it takes a longer time and the passenger loses that time. In the second place, it costs the transportation company more, and that extra cost must ultimately reduce the total productive power of the community.

Access to food supplies. It seems to be a general rule, applying to all forms of life, that numbers depend upon food supply. Where food is abundant, numbers may be large. Since food comes ultimately from the soil, the capacity of the soil to produce food places a limit upon numbers. One of two things must, of course, follow: a large population must either spread over wide areas of land in order to find sufficient food or it must transport food from these wide areas where it is produced to the densely populated centers where the people live. If we were not able to transport food and other supplies such long distances, our large

cities would be compelled to scatter and build many smaller cities, or else live as scattered families, in order to be nearer the sources of supply. Even with our present means of transportation there are limits beyond which it does not seem advantageous to concentrate our population.

Increasing floor space by erecting tall buildings. The necessity for room for the indoor industries can be supplied in part by tall buildings. Floor space can be increased by as many stories as can be built, subtracting, of course, the space necessary for elevators, stairways, airshafts, etc. But after a very moderate height is reached, the cost of construction increases more than in proportion to the added floor space. To add one more story on the top of a tall building requires stronger walls all the way down and also a better foundation. Besides, it costs more to carry the building materials to the greater height; the cost of elevator service to the top floor is somewhat higher than for lower floors. A twenty-story building is of a very moderate height in some of our large cities where land is very scarce; but even this height would be absolutely unprofitable in a town where there was plenty of room on the ground.

Streets. The traffic needs of a busy population also make demands upon land for streets. Much the same methods are used to economize land for street purposes as for building purposes. The building of subways, sub-subways, elevated roads, and viaducts is a familiar method. It used to be suggested in a jocular way that a road through the air would also economize land. Flying machines may eventually transform that joke into a real economy. Superior pavements for the support of larger and more powerful vehicles will also economize road space somewhat by permitting more traffic to be carried on over a street of given width.

Economizing agricultural land. These methods of economizing land are suited to urban rather than to rural districts. Space is required in agriculture, as suggested above, for the utilization of solar energy, soil, and moisture in plant growth. "Two-story farming," as Professor J. Russell Smith calls it, consists in growing tree crops with ground crops underneath. Some space can be

saved in these ways, provided there is plenty of sunlight, soil, moisture, and other elements of plant growth.

Intensive farming. "Two-story farming" is only one phase of intensive agriculture, which may be defined as the use of large quantities of labor and capital in the cultivation of relatively small areas of land in order to get large crops per unit of land; that is, large crops per acre. As will be shown in Chapter XIV, extreme efforts to increase the productivity of land tend to decrease the productivity of labor; that is, to reduce the product per unit of labor. When a country becomes thickly populated, however, if its people are unwilling to migrate to countries where land is abundant, the problem of economizing land becomes one of great importance. So long as the people can find outside markets for the products of indoor industries, they may sell these products to foreign peoples and buy the products of the soil from less densely populated countries. When these outside markets cease to expand, and the population is therefore compelled to live more and more from the products of its own soil, it must perforce get more and more out of its soil. Intensive agriculture is then forced upon it. Yet, as a matter of observed fact, highly intensive agriculture the world over is associated with the poverty of those who actually work on the soil.

Turning to heavy-yielding crops. If people would change their habits of consumption and consume products which could be economically produced under intensive methods or products which are capable of yielding large quantities of food per acre such as potatoes, parsnips, and beans, instead of wheat and beef, a great deal of land could be saved; in other words, a much larger population could be supported from a given area.

Turning to the indoor industries. It is not likely to be repeated too often that the favorite method of economizing land and supporting a large population is to give up trying to be physically self-supporting and to become commercially self-supporting. By being physically self-supporting is meant producing from our own soil all or practically all that we need. By becoming commercially self-supporting is meant bringing in the

products of the soil from other countries, selling to those countries in return the products of the mines and the indoor industries. The products of the indoor industries may themselves be made from imported raw materials. In this case we bring in raw materials, work them up into finished products, and sell them again to outside people, living ourselves upon the profits of the transaction. We virtually sell our labor to other nations.

Indoor industries limited by market. This method of building up a great population has such vast possibilities, provided we are so situated as to be able to do it, as to appeal powerfully to the imaginations of statesmen and nation builders. But if outside markets fail, then we must turn to the development of our own soil, for in that case we must become physically self-supporting.

The pent-up versus the expanding type of civilization. Even though we aim to become physically self-supporting, we have two distinct lines of development open to us: one is to develop an oriental, or pent-up, type of civilization; the other is to develop an occidental, or expanding, type of civilization. By an oriental, or pent-up, type of civilization is meant a civilization in which we try to live on our existing area of land and to support a growing population without adding to our productive area, as is done in China and India. This leads to a gradually increasing intensity of cultivation and a gradual lowering of the standard of living of those who work on the soil, and eventually of the masses of the people. By an occidental, or expanding, type of civilization is meant a civilization in which the effort is made to maintain a high standard of living and a large product per man by widening our cultivated area as the population grows rather than by cultivating the original area more and more intensively. When our ancestors came to this continent and later spread over it, they were developing an expanding type of civilization.

Our people have preferred to expand over more land rather than to try to live on the original area, whatever that original area may have been. It is difficult to see where this tendency will lead us, but it is a rather striking fact that, from the Greeks down to the nations of the present, every great European nation has been a

colonizing nation. Thus people have preferred to go where land was abundant, rather than to stay where population was dense. Unless we change our habits very decidedly, we shall probably continue to do the same in the future; that is, we shall try to maintain our standard of living. When this cannot be achieved by intensive cultivation, we shall swarm, or send out colonists; that is, some people will emigrate. The only alternative would be the maintenance of a stationary population through birth control.

EXERCISES

1. What are the two factors which give value to land?
2. Why is location so important?
3. What are some of the means of economizing space (1) in cities? (2) in the country?
4. What is meant by intensive farming?
5. Is it a means of economizing labor or of economizing land?
6. What fixes the limit to the development of indoor industries in a country?
7. What is the difference between a pent-up and an expanding type of civilization?
8. Which is preferable for the United States?

CHAPTER XIV

KEEPING A PROPER BALANCE AMONG THE FACTORS OF PRODUCTION

Combinations must be balanced. In the production of almost any article it is necessary to make use of a great many things, different kinds of material, different kinds of tools or machines, and different kinds of labor. All these elements that enter into its production must be combined in certain proportions in order to get the most satisfactory results. This is true not only of producing a chemical product and of cooking a dish; it is equally true of growing corn, feeding cattle, manufacturing cloth, or producing anything else.

If things are thrown out of balance some unsatisfactory result is certain to follow, even if the product itself is not spoiled. This unsatisfactory result may show itself on the market in unsatisfactory prices, even if the producer refuses to spoil the product by a bad mixture. He may refuse to buy all of one ingredient that happens to be too abundant to balance the limited quantity of another ingredient. If, for example, sugar is scarce and cranberries abundant, cooks and housekeepers may refuse to buy more cranberries than can be sweetened with the limited supply of sugar. Cranberries will then be hard to sell.

Balanced ingredients. In the manufacture of old-fashioned gunpowder, to take another example, charcoal, saltpeter, and sulphur were required, and they had to be combined in fairly definite proportions. If it happened that there was more charcoal on the market than would combine with the limited supply of one of the other ingredients, say saltpeter, the production of gunpowder was limited by the small supply of saltpeter and not by the supply of charcoal.

Balanced agents of production. This principle applies not only to raw materials which are used in various lines of production but to the active agents themselves, such as labor. However numerous the hodcarriers might be, if there were a great scarcity of brick and stone masons, not many hodcarriers could be used. At bottom this is much the same problem as that of balancing rations or fertilizers.

A balanced nation. This principle of balancing up the factors of production is just as important for the nation as a whole as it is for the individual farmer or manufacturer. The country which possesses a surplus of land and a scarcity of labor will find that its land is very ineffectively used. What it needs is more labor. It cannot very well sell its land, but it will in all probability pursue a policy which will increase its labor supply. Labor under such conditions will be in great demand, and for the same reason that in dietetics protein will be in great demand if it is scarce while the other food elements are abundant. In such a community land is certain to be cheap and labor dear. The high price of labor, the ease with which men can establish themselves on the land as independent farmers, or get remunerative work, encourages immigration on the one hand, and, on the other hand, early marriages and large families among the native born. This is especially true on the farms, where labor is scarce and land abundant. Every additional child is money in the farmer's pocket, because as soon as the child is old enough to work he helps to solve the ever-present problem of scarcity of labor. Thus, from two sources the labor supply is increased in response to the effort to balance the factors of production.

But tools and equipment of all kinds, which are generally included under the word "capital," are almost, though not quite, as essential as either labor or land. If capital is scarce while the other factors are abundant, it will be in great demand, for the same reason that labor is in great demand where it is scarce and land abundant.

An overpopulated country, on the other hand, finds itself with a badly balanced industrial system, but the balance is in this case

disturbed in the opposite direction. Land being the scarce factor, every acre that can possibly be used is of the utmost importance. Labor, on the other hand, is cheap. It can easily be spared. If it sees fit to emigrate to other countries, no great effort is made to prevent it and no high price is offered it as a reward for staying at home. Under such circumstances, to hold an acre of land out of use would seriously reduce the total production of the community, whereas to lose a laborer by emigration is no great loss.

The fundamental problem of scientific management. The fundamental problem of all management, whether it be the management of a diet kitchen, a farmer's feeding lot, a farm as a whole, a factory, a railroad, or a nation, is the problem of balancing the factors of production.

A balanced population. The greatest danger of all, however, and the one which, apparently, is least appreciated by some of our statesmen, is that of producing a badly balanced population. At the beginning of this chapter the question of the balancing of the hodcarriers and the brick and stone masons was mentioned. This may be taken as typical of the necessity of balancing skilled labor and unskilled labor. To have more unskilled labor than can be used effectively with the limited supply of skilled labor is quite as bad as to have more people than can be supported on the land, or fewer people than are necessary to utilize the land. To have more manual labor than will combine effectively with mental labor, to have more mental laborers who are capable of doing only routine work than will combine effectively with those mental laborers who possess originality, inventiveness, and the power of leadership, is also to produce a bad balance.

Probably the most important of all problems of statesmanship, and at the same time one of the most difficult, is that of balancing the population so that no particular class of labor is either oversupplied or undersupplied with respect to any other class. One method of preserving the balance is by education and vocational guidance. Training men for the occupations where men are needed, as evidenced by the high wages and salaries paid, is one of the quickest and most effective ways of preserving the balance.

Whenever any occupation is so undermanned as to make it difficult to find workers, wages or salaries will tend to rise. This increase in remuneration is then a standing invitation to young men to prepare themselves for that work, and a properly conducted educational system is a standing opportunity to young people to accept the invitation.

Differential birth rates. A wholesome moral life would also be a powerful agency working in the same direction. Those who have demonstrated that they are needed by the fact that they can fill good positions for which there is a demand, where incomes are consequently large, are the ones who ought to reproduce their kind most abundantly. Unfortunately, in most modern communities, they are the very people who multiply least rapidly.

Geographical redistribution of population. That it is better for a growing population to have more land than to remain cooped up in its original home is the idea on which a great deal of the history of the world has been made. The migrations of peoples in search of more land is one of the large aspects of human history. There could be no possible object in seeking more land, instead of remaining content with the land in the possession of the people, were it not for the fact of diminishing returns. Therefore a very discriminating writer[1] has stated the opinion that the law of decreasing returns is the fundamental fact of human history. The effort of a growing population to acquire more land is, from the standpoint of the present chapter, merely an effort to restore the balance between factors of production. In any given state of civilization too dense a population—that is, too much labor and too little land—works to the disadvantage of the people. When they begin to perceive that they would be better off if they had more land, nothing except a strong military guard or a Chinese wall will prevent emigration.

Migration of capital. But capital follows the same law. In a community where the land and labor are not properly balanced with an adequate supply of capital, the perception of a need

[1] Edward Van Dyke Robinson, "War and Economics," *Political Science Quarterly*, Vol. XV, pp. 581–622.

for more capital—that is, tools and equipment—is likely to be pretty clear and definite. This leads to the offer of high rates of interest as an inducement to capital to come. The fortunate individual who can gain possession of an additional fund of capital, being able to increase his product considerably, finds it economical to pay a high rate of interest for it rather than not to get it. If he owns his own capital, whereas his competitors in production lack capital, he will have a great advantage over them and will therefore secure a large income. According to our analysis in the chapter on The Source of Interest, this additional income which he gets from the use of his own capital is interest as truly as the income which he gets from lending his capital to someone else.

EXERCISES

1. Are there many things that can be produced without a combination of factors?

2. Does it make any difference in what ratios the factors are combined?

3. In case the factors are not to be found in the right proportions, which factors are likely to be more desired, those which are scarce or those that are abundant?

4. Which would add more to production, to add to the quantity of the scarce factor or to add to the quantity of the abundant factor?

5. What is meant by a balanced nation?

6. What is the fundamental problem of scientific management?

7. What is meant by a balanced population?

8. What are some causes that tend to throw the population out of balance?

9. What could be done to restore the balance?

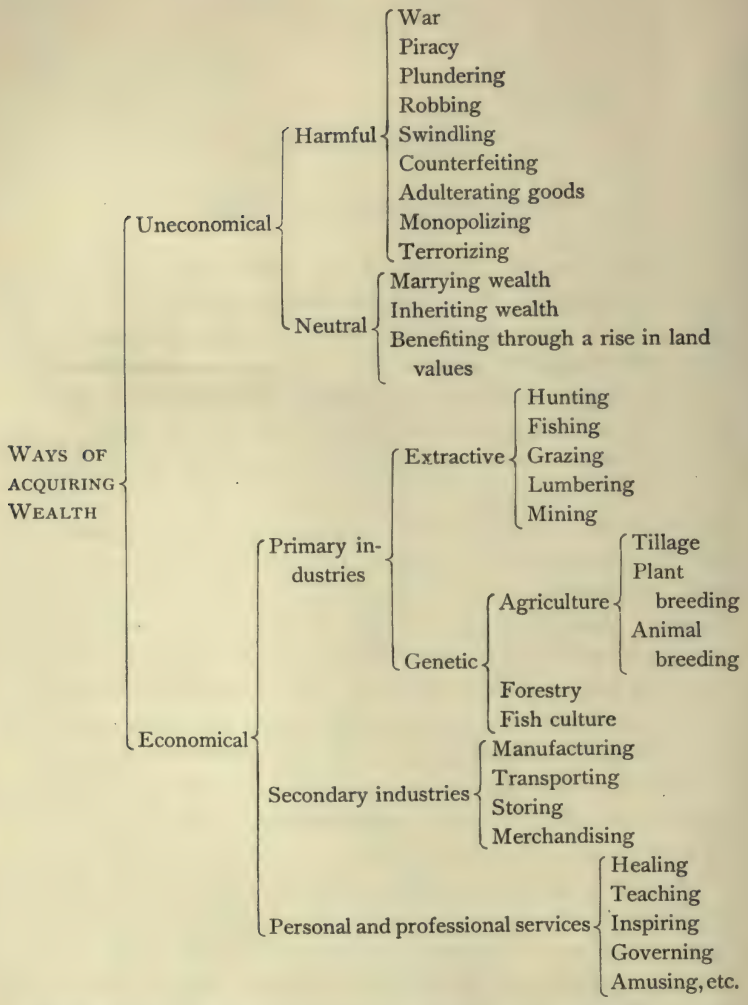
PART THREE. THE PRODUCTIVE ACTIVITIES

CHAPTER XV

WAYS OF GETTING A LIVING

In Part One we considered the underlying conditions of national prosperity. We found the most important of these conditions to be a good geographical situation and a vigorous, intelligent, and progressive people. Of these two we found the latter to be of vastly the greater importance. Much depends upon the quality of the people and much upon their ways of doing things. In Part Two we considered the principal means by which the labor power of the people may be economized, to the end that production may be increased without putting an increased burden of physical labor upon the people. In Part Three we are to consider the principal activities in which men engage in prosperous countries, these being the activities that make the countries prosperous. Men engage in these activities, in the main, for the purpose of getting a living; but while this is usually their purpose, the result of pursuing these activities is that individuals make the nation prosperous while trying to become prosperous themselves.

Individual and national prosperity. It must be understood, however, to begin with that some individuals may sometimes, if the laws permit, gain at the expense of the nation, whereas most of the others gain by adding to the prosperity of the nation. Some may, if they are permitted to do so, gain wealth at the expense of the rest of the people, while others gain wealth by contributing useful service and producing useful things for the rest of the people and receiving good pay for their services and their products. It is of the utmost importance that we understand what activities enrich the nation as well as the individuals who carry them on and what activities may enrich the individual at the expense of the nation.



Economical and uneconomical ways. The diagram above should be studied very carefully. In this diagram the ways of acquiring wealth are divided into two main classes — the uneconomical and the economical. From the social or national point of view it is uneconomical to have men acquiring wealth

by methods which do not add to the total wealth or well-being of the society or the nation. When one man gains something by plundering, swindling, counterfeiting, or monopolizing, someone else loses a like amount, and nothing is added to the total. In fact, if these harmful methods become general, it is likely to discourage honest industry and actually diminish the total production of wealth. Even the neutral methods may become harmful if they result in wasted lives; that is, if they enable men and women who would otherwise be productive and useful to live in idleness and luxury. The smaller the proportion of the people who live by means of the uneconomical methods, the more prosperous the nation is likely to become.

By the economical ways of acquiring wealth are meant all those ways by which an individual contributes to the wealth of the whole community as much as he gains for himself. He may make his contribution by laboring either to produce commodities or to render direct service to some of his fellow men. In either case, where he gives honest service for honest pay he is enriching someone else in proportion as he himself is enriched. A nation in which this rule prevails universally, where everyone is contributing to the well-being of someone else in exact proportion as he himself prospers, has at least one of the conditions of general prosperity. If each one is capable and well trained, so that he can give efficient service,—that is, if he contributes largely to the prosperity and well-being of someone else,—then everyone is prosperous, which is the same as saying that the nation as a whole is prosperous.

Economical ways of getting wealth. The economical ways of getting a living are subdivided into three classes: first, the primary industries; second, the secondary industries; and, third, professional and personal service. The primary industries are those which produce commodities directly from their original and natural sources,—which take material as nature provides it and appropriate it to some human use or change it from a form which is not usable to a form which is either usable or one stage nearer to usableness. For example, the elements which produce plant growth are not, in their natural state, available for human use.

The farming industry converts these elements into something which is either usable, as in the case of fruits and vegetables, or at least one stage on its way toward it, as in the case of grain or live stock. The secondary industries are those which take the products of the primary industries which are in need of further modification and carry them through the remaining stages on their way to final usefulness. The farmer's grain, besides being transported long distances from places where there is a surplus to other places where there is a shortage, must also be stored from threshing time until it is needed by the consumers, and it must be ground into flour and baked into bread or manufactured into some other form of food before it is ready for use.

Personal and professional services include all lines of work which do not directly produce salable commodities. Lawyers, doctors, preachers, teachers, actors, barbers, policemen, and even public officials, besides multitudes of others, are performing professional and personal services.

Necessity of repressing uneconomical ways. It is apparent that if all uneconomical ways of getting a living could be repressed, at least all the harmful ones, it would be a good thing to repress them. Then everyone would be compelled to get his living, if at all, by doing things that would enrich the rest of the people as well as himself. The nation would then prosper more than it possibly could if a considerable part of the people wasted their working power in doing harmful or useless things rather than useful or productive things.

Difficulty of repression. The coarser forms of crime and fraud are pretty effectually repressed now in all civilized countries, but there are some more refined forms that are difficult to repress by law. False advertising, overzealous salesmanship, political campaigning that verges on demagogy, public discussion in which illogical and unsound arguments are used, are very difficult to control by law. Even to attempt to control them opens the government to the charge of interfering with the freedom of speech or the liberty of the press. The result is that it is still possible to gain trade or political office by mild and subtle forms of deception,

if one is unscrupulous enough to use these methods and skillful enough to use them effectually.

Not skill but service. There is a certain popular belief, fortunately growing less popular, that skill is entitled to a reward. If that were true the skillful swindler would be entitled to the results of his skill. Not skill but service should be the basis of reward. In other words, when skill is used serviceably, it is entitled to a reward, otherwise not.

The way of usefulness versus the way of violence. Even violence and terrorism are still used to a certain extent. There are still, in fact, two widely different methods of getting what you want. One is to make yourself so useful that others are glad to pay you, or to give you what you want, in return for your service or your product; the other is to make yourself so dangerous that others will be afraid to refuse you what you demand. The one pursues the method of voluntary agreement among free citizens; the other pursues the method of force. The one appeals to good will; the other to fear. The one is constructive; the other is destructive. The one is the method of civilized men,—that is, of men who have learned the art of living and working peaceably together in large numbers; the other is the method of savages—that is, of men who have not learned how to get along peaceably together.

Real distinction between civilized and savage men. This is really the broadest distinction between the civilized man and the savage. The civilized man has many vices as well as many virtues, and the savage likewise. Some vices the civilized man possesses in greater degree than the savage man. But the savage has one fatal weakness that will always, until he loses it, hold him down and prevent his tribe from rising to prosperity and power. He is prone to use force at times and not to rely wholly upon persuasion,—to get what he wants by making himself so dangerous that other people will be afraid to refuse his demands. With all his vices the civilized man has one supreme virtue that will always, so long as he keeps it, keep him ahead of the savage. He relies primarily upon persuasion and good will as means of getting what he wants.

He tries to get what he wants by making himself so useful that others will be glad to pay him for his product or his service. This is the only way in which men can live together in large numbers without fighting among themselves. They who can live and work together peaceably in large numbers will always prosper more than those who cannot.

Why civilized men are more prosperous than savages. There are fundamental reasons why those people who can live and work together in large numbers without fighting among themselves will always prosper more than those people who cannot. All the energy of those who have learned this art can be used in production and service. That makes prosperity. Those who have not learned it waste a great deal of their energy in destructive fighting, and, in addition to wasting their productive energy, they destroy much that is already produced and discourage others from trying to produce.

No nation is wholly civilized or wholly savage. In other words, a civilized nation is not one in which all are civilized and none savage; it is rather one in which the balance of power is held by the men of peace and the men of violence are held in check. A savage nation is not one in which all are savage and none civilized; it is rather one in which the men of violence hold the balance of power and the men of peace have no chance.

The duty of being civilized. In view of what has been said in this chapter, anyone who really cares to see his country grow prosperous and great must study the differences between the economical and the uneconomical ways of getting a living. He must then be careful, first, to select an economical rather than an uneconomical way of making his living, and, second, he must throw the weight of his influence against all uneconomical ways. These must be discouraged, particularly the harmful ways, by law and by public sentiment, while all economical ways must be encouraged in every possible way, by favorable laws, by public sentiment and social esteem, and by private example.

EXERCISES

1. What is the difference between an uneconomical and an economical way of getting a living? Name some occupations that come under each of these two classes.

2. How would you classify the economical ways of getting a living?

3. What are the primary industries?

4. What are the secondary industries?

5. Why is it advantageous for the government to repress the uneconomical ways of getting a living?

6. Why is it better to get what you want by making yourself useful than by making yourself feared?

7. Why are civilized men more prosperous than savages?

CHAPTER XVI

THE EXTRACTIVE INDUSTRIES

In the last chapter the rather obvious fact was stated that the prosperity of the nation depends upon the usefulness of its citizens. One of the surest ways of increasing the usefulness of the average citizen is to make it possible for him to win prosperity for himself by making himself so useful that others will be glad to pay him well for his usefulness; that is, for his product and his service. In the next few chapters we shall consider some of the leading forms which this usefulness takes. In other words, we shall consider some of the leading types of useful industries and occupations.

The primary industries. As shown in the diagram in the preceding chapter, the primary industries are subdivided into two classes—the extractive and the genetic. Extractive industries are those which merely appropriate natural objects, without any attempt to replace what is taken or to keep up and increase the supply. The genetic industries, which might almost be called creative, are those primary industries which make a conscious effort to replace that which is taken and to increase the supply. Thus, hunting wild animals and grazing domesticated animals on wild grass are extractive industries, whereas tillage and stock breeding are genetic. Lumbering or cutting timber in a natural forest is extractive, whereas forestry, the scientific growing of timber, is genetic.

Hunting. Of all the industries hunting is the most primitive. It was sometimes combined with fishing as a means of subsistence. It usually included the search for edible fruits, nuts, and vegetables, as well as the killing of animals; and it sometimes even degenerated into a man hunt—that is, the hunting, killing, and robbing of men. Where animals constituted the most abundant

BEAVER AT WORK

The prosperity of the early colonists and of our first pioneers in the Far West was based largely on the beaver skins which they collected and sold

source of food, primitive men quite naturally hunted animals. Where fruits, nuts, and edible roots were abundant it was not uncommon for the search for these foods to become the chief occupation. The hunting of animals led naturally to domestication and herding, and the search for fruits and herbs led quite as naturally to horticulture as the next stage in industrial development. Our own primitive ancestors seem to have been hunters, and later herdsmen, before they took up agriculture.

Hunting, which includes trapping, has played an important part, and still plays an appreciable part, in our national economy. The abundance of game on our Western frontier, when we had a frontier, was an important source of food for the advance army of settlers. The emigrants who crossed the great plains in the early settlement of the mountain states and the Pacific coast also benefited to a certain extent from the herds of buffalo, deer, elk, and antelope which at one time abounded. More important, however, was the regular business of trapping fur-bearing animals and of trading with the Indians for the skins and furs which they collected. A great deal of the history of our frontier, beginning with the first settlements on the Atlantic coast and continuing across the continent, has been a history of the fur trade. Many of our Western pioneers, guides, and scouts, of whom Kit Carson was the most famous, began their careers as hunters and trappers for various fur-trading companies. The story of their adventures adds a romantic element to the early history of our Far West, but they were making their living by gathering furs to supply the demands of commerce.

Fishing. While hunting, as a source of national wealth, tends to decline in importance as the country develops, fishing seems to increase. One reason for the decline of hunting is the simple fact that land becomes too valuable for other purposes to be allowed to remain in its wild state as a refuge or feeding-ground for wild animals. When it is turned to other purposes most of those animals must of necessity disappear. The same is apparently true of the fish in many inland streams which once furnished small quantities of this kind of food. But the larger lakes, and

especially the oceans, furnish an almost inexhaustible supply of excellent food. As population and the demand for food increase, the harvest of the sea assumes a more and more important part in our national economy.

Pasturage. It would be impossible to estimate how much the civilized races of the north temperate zone owe to such domestic animals as the horse, the ass, the cow, the sheep, the goat, and the pig. All these animals have, at one time or another, furnished food for man. The horse and the ox have furnished that which has played almost as important a part as food in man's conquest of nature; namely, power. Before steam and electricity had been harnessed, or water power developed, these animals were almost the only sources of power besides human muscles. The skins of all were and are still utilized, there being no very good substitute for leather even to this day. The cow and the goat have furnished, and still furnish, milk—one of our most important articles of diet. The wool of the sheep is even now, next to cotton, the most important material for the manufacture of clothing.

In their native state all these animals except the pig lived almost exclusively upon grass, either green or dried in the form of hay, and they still depend mainly upon it. Even the pig, with his omnivorous appetite and his accommodating stomach, will thrive on grass as his chief article of diet, though he needs some more concentrated food in addition if he is to make his best growth. Grass and grazing have therefore played a very important part in the economic life of that branch of the human race from which we are derived. Our ancestors were already herdsmen before they emerged from prehistoric darkness. All the animals now under domestication and all the fowls except the turkey were domesticated so long ago that we have no record as to where or when it occurred. It may give us a new respect for those prehistoric ancestors of ours when we reflect that we have never succeeded in thoroughly domesticating any quadruped since we have had a history, though we may soon succeed with the zebra.

Grazing on our Western frontier. From the earliest settlements in the territory now occupied by the United States, grazing

has been an important industry. Following closely in the wake of the hunters, trappers, and fur traders, and in advance of the farmers, have gone the herdsmen. The wild grasses furnished a ready source of income to the man who possessed animals capable of turning them into salable products. The frontier settlements in colonial New England possessed large herds of cattle, and down to 1820 beef was one of the principal exports. Hogs ran wild in the woods, and, living as they did on roots and mast, they furnished an abundant supply of meat. Horses were exported in considerable numbers. After the danger from wolves was reduced, sheep were grown in large numbers. In Virginia and the Carolinas grazing developed even more rapidly.

Cattle ranching. When the advance waves of settlement reached the great prairies of the West the grazing industry entered a new phase. Those natural meadows of vast extent furnished a much more abundant pasturage than had the great forest which had covered the eastern third of the country. On these Western prairies—the former home of countless herds of buffalo, deer, elk, and antelope, all of which were grazing animals—cattle and sheep were very economically produced and would have been enormously profitable had not the prices of beef, mutton, wool, and hides fallen so low as barely to cover the low cost of production. Dwellers in Eastern cities enjoyed abnormally cheap meat and continued to do so until the very end of the nineteenth century, since which time meat prices have been gradually approaching a normal level again.

Lumbering. Next to grass the most valuable natural product of the soil is timber. Though this is sometimes called the age of steel, wood is still an important and almost indispensable material. The first settlers on our Atlantic seaboard found a dense and apparently limitless forest extending from the coast westward. It was not until well into the nineteenth century that the advance guard of the army of Western migration began to emerge from this forest onto the great prairies of the West. Timber was so abundant as scarcely to be considered an economic good. Certainly the settlers had little occasion to economize it. The best of it they used

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BRANDING CATTLE ON A WESTERN RANCH

Here the cattle wander at will, and ownership is determined by the brands. Beef is produced at a low cost in terms of labor, but a high cost in terms of acreage. This method is economical only where land is cheap and labor dear

rather lavishly; the rest they destroyed in order that they might use the land for things which they needed more than they needed timber. Along the northern tier of states the great forest extended as far west as Minnesota. In the middle strip the prairies began in parts of northern Indiana. Farther south the forest followed the Ohio valley to the Mississippi and extended beyond through central and southern Missouri, Arkansas, and Louisiana into portions of eastern Kansas, Oklahoma, and Texas. Other forests were found in the high mountains of the West, but the finest of all were found in the region of Puget Sound in our extreme Northwest.

After the first onslaught of the settlers, who were bent on getting rid of the timber in order to clear the land for cultivation, lumbering became a regular business in every part of our forested area. Its greatest development was in lands which were not the most valuable for agricultural purposes. Along our northern border, where the climate was somewhat severe and where the soil was rather light and sandy, the timber was not destroyed in order to clear the land, because better lands were available farther south. When the timber of this northern strip came to have a commercial value it became the scene of lumbering on a large scale. Large companies were formed, thousands of men were employed, and great fortunes were made. Lumbering in this region, particularly along the Great Lakes and the upper tributaries of the Mississippi River, where water transportation was cheap, developed rapidly during the latter half of the nineteenth century and then declined rapidly.

A similar development took place in the Southern states. Here the greatest activity was along the southern coast, just outside of the Cotton Belt; that is, on land which was not cleared primarily for the purpose of growing cotton, but where the timber was left standing until it had acquired a commercial value through the increased demand and the improvement of transportation facilities. The most valuable timber tree of this belt was the yellow pine, as the white pine had been of the northern belt.

SAWING LUMBER FOR OUR HOUSES

Lumbermen must turn out fifty billion feet a year in order that we may have houses and furniture enough

The greater part of our original virgin forest has now been destroyed. Such cut-over lands as are not suitable for other purposes, or are not needed immediately for agriculture, will undoubtedly be allowed to reforest themselves or be reforested by scientific methods, but it is safe to say that the days of cheap and abundant timber in this country are passed. From this time forward careful conservation will be necessary in order to safeguard an adequate supply.

Mining. The greatest of all our extractive industries is mining. Within the boundaries of the United States are found a wealth and variety of minerals such as no other country is known to possess, though no one knows what new discoveries may yet be made in this and other lands.

Notable among our mineral products are the following. The values given are for the year 1917.

Coal	Bituminous	$1,249,272,837
	Anthracite	283,650,723
Iron	Ore	238,260,444
	Pig	1,053,785,975
Copper		514,911,000
Petroleum		522,635,213
Natural gas		140,000,000
Gold		83,750,700

Silver, lead, zinc, aluminum, cement, building stone, lime, and salt are also valuable products, besides many others of less value. Our total mineral production for the year 1915 aggregated more than two and a third billions of dollars.

Since minerals are not reproduced or replaced when once extracted from the earth, it is only a question of time before all of our rich deposits will be exhausted. In some cases the deposits are so enormous as to remove the time of their exhaustion far into the future, so far that it is difficult for us to realize that it is coming. Authorities agree that our coal deposits will last for many hundreds of years, some say many thousands of years. If, however, we have enough coal to last, let us say, for only a thousand years, it is a difficult question to decide to what extent

COAL MINERS AT WORK

that should give us concern for the future welfare of our country. With the progress of invention we may find other sources of heat and power before our coal is gone. Probably our best policy is merely to avoid unreasonable waste or destruction of mineral resources and then leave future generations to work out their own problems.

Instability of the extractive industries. All our extractive industries have not only added greatly to our material wealth, they have likewise given rise to picturesque but somewhat unstable phases of our social life. The early hunters and trappers were a hardy, adventurous race, whose deeds and prowess have become a part of our national history. Our herdsmen likewise, especially those who developed the cattle business on the Great Plains, supplied an element of romance and adventure which still appeals to the imagination of our young people. Our hardy fishermen and whalers have given splendid examples of the courage and strenuosity which can wrest a living from the unconquerable ocean. Our lumber camps and our mining camps have drawn adventurous characters from the ends of the earth and furnished much excellent material for the story-writers. But instability is a characteristic of these industries and consequently of the life which grew up around them. Stability can be supplied to our national life only by industries which are themselves self-perpetuating. The genetic industries must supply that need.

EXERCISES

1. What are the extractive industries, and why are they so called?
2. What part has hunting played in our national history?
3. What part has fishing played?
4. What is the most valuable natural or wild product of our soil?
5. What part has grazing played in our national history?
6. In what sections of this country did lumbering develop on the largest scale?
7. Which is the greatest of our extractive industries?
8. Is it likely that a stable civilization can be built up on the extractive industries alone?

CHAPTER XVII

THE GENETIC INDUSTRIES

What are the genetic industries? By the genetic industries are meant those in which men make conscious and systematic efforts to direct the biological processes of reproduction so as to increase the supply of desirable plants and animals. The greatest

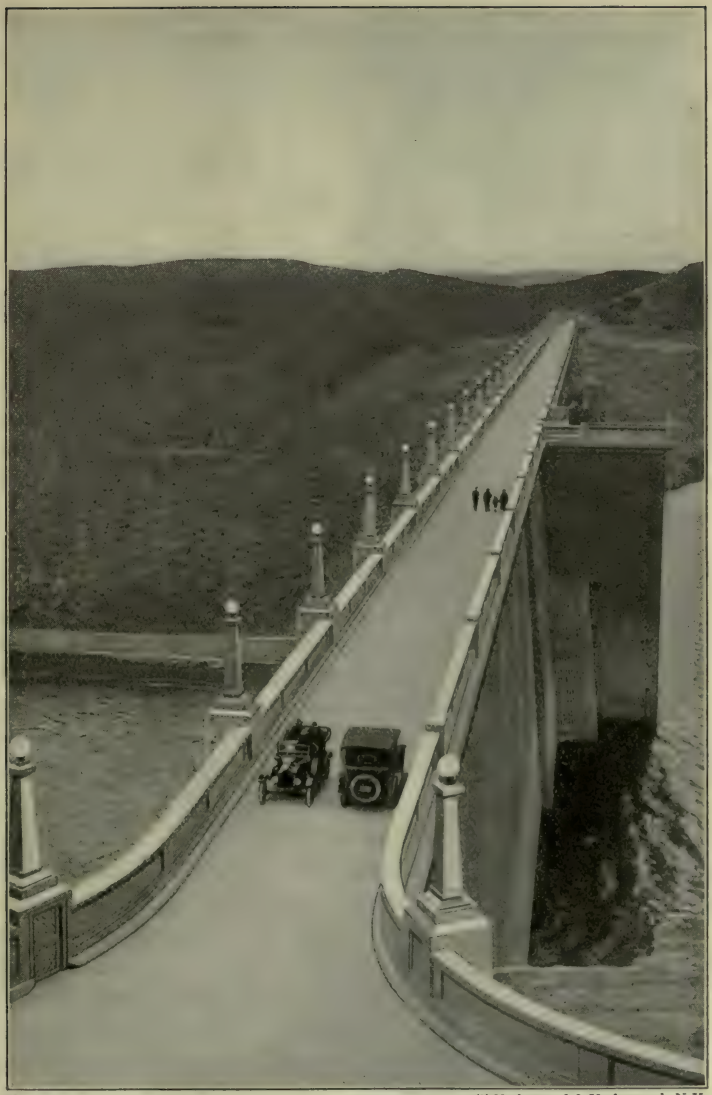
of these is agriculture, though forestry and fish culture are also included. Agriculture, however, is sometimes carried on in such a slipshod manner as scarcely to deserve to be classed as a genetic industry. A genuinely genetic type of agriculture can endure and even improve for indefinite periods of time on the same soil; that is, it not only preserves but improves the fertility of the soil, generation after generation, for hundreds and thousands of years. It thus makes possible a stable, an enduring, and an expanding civilization, such as could not be supported exclusively by any of the extractive industries.

Demand of all outdoor industries for space. All of those industries which appropriate or increase the products of the soil, such as hunting, grazing, lumbering, forestry, and farming, have

one characteristic in common. They all require a great deal of space as compared with mining and the secondary industries, such as manufacturing and merchandising. So great is this demand for space on the part of those industries which gather in or develop the products of the soil that it is impossible to house them, and they are of necessity outdoor industries. Moreover, those who engage in them must of necessity spread themselves over wide areas. They are compelled by the nature of their industries to live in scattered homes or in small villages located far apart. Living so far apart, with plenty of room, in close contact with nature but in little contact with other men because of the distances between them, produces a profound reaction upon their lives and characters. It is sometimes difficult for indoor and outdoor people to understand one another.

Stages in the economy of land. We have seen in the last chapter that the utilization of the soil, not only on our own frontier but also in the development of civilized life among our remote ancestors, passed through several distinct stages, such as the hunting stage, the grazing stage, and the agricultural stage. These are progressive stages in the economizing of land. It takes a great deal more land to support a given population by hunting than by grazing, and by grazing than by agriculture. When game grew scarce, or when population increased, those who had the wisdom to make the change were forced into grazing and then into tillage, in order to increase their means of subsistence. That hunting was an uneconomical use of land may be inferred from the fact that there were never, according to the best authorities, more than one million Indians within the boundaries of the present United States. This territory now supports approximately a hundred times that number of people and supports them more comfortably than the Indians were supported. It is primarily through tillage that this territory is now made to yield so much more subsistence.

Tillage. Tillage consists essentially of three processes: first, preparing a good seed bed, in which plants can grow more vigorously than in natural, or unprepared, soil; second, planting in this bed the seeds of such plants as are deemed more useful or



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A BEAUTIFUL BRIDGE AND A HUGE IRRIGATION DAM COMBINED

By means of this dam across the Upper Rio Grande in New Mexico, water will be stored for the irrigation of thousands of acres of dry land

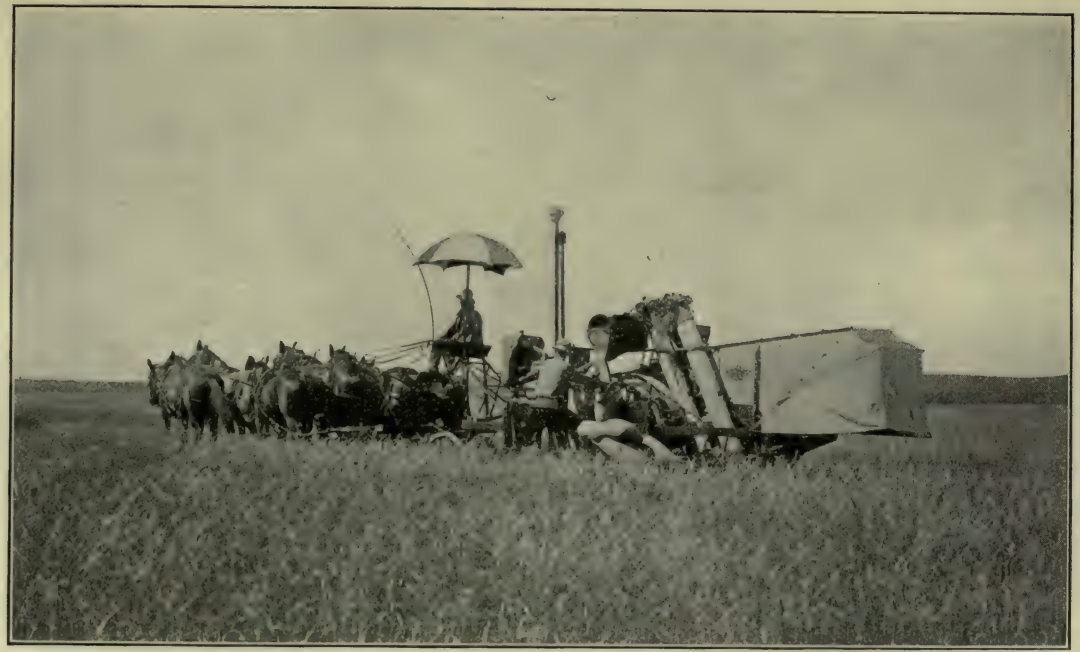
desirable; and, third, destroying all other plants, commonly called weeds, which may start to grow in competition with the plants whose seeds were planted.

The law of diminishing returns. It is possible, however, to carry tillage so far as to produce undesirable results, or to try to grow so much per acre as to reduce the product per man. It is this phase of the question of economy that is commonly known as the law of diminishing returns from land. This law is simply that, after a certain amount of labor with the appropriate tools has been applied to the cultivation of a given crop on a given piece of land, further applications of labor to the same land do not yield proportional returns. They may increase the crops slightly, thus increasing the yield per acre, but they will not increase the crop in proportion as the labor is increased. The result is a decrease in proportion to the number of units of labor.

The great law of productivity. This law of diminishing returns has been called the great law of agricultural production. It is a part of a wider law, which may be called the law of variable proportions[1] and which is the fundamental law of all production. For the present it is sufficient to point out that it presents the problem of balancing the different factors which have to be combined in production. It is much the same problem at bottom, whether it be the balancing of the different elements of plant food in fertilizers or of the different elements of animal food in the feeding of cattle, the balancing of such factors as labor, land, and capital in running a farm or a factory, or the balancing of the different kinds of people that make up a nation.

The largest industry. Agriculture is not merely one of the basic, or primary, industries; it is the most important of all industries, if we consider the world at large or any large section of it which is compelled to live within itself. Considerable sections of country and considerable masses of population may live primarily by the indoor industries, sending out their surplus produce to distant lands and bringing back in exchange the products of the soil. Thus, a country like England, or considerable portions

[1] For a fuller discussion see chapter on the Law of Variable Proportions.



A COMBINED HARVESTER AND THRESHER AT WORK ON A GREAT WHEAT FARM

of our own country, such as southern New England, may become largely urbanized; that is to say, the greater portion of the people may engage in indoor rather than in outdoor industries. But they live by selling the products of their indoor industries to people far beyond their own boundaries and bringing in from the ends of the earth the products of the soil.

The United States as a whole is tending to become an urbanized nation; that is, it is tending toward a condition where more than half of its people will work indoors rather than outdoors. Again, there is a tendency in the world at large for the indoor industries to gain somewhat in importance as compared with the outdoor industries, though it is unlikely that the former will ever actually overtake the latter.

Why agriculture is losing ground. As civilization advances, people tend to demand finer and finer products for consumption. Usually, though not in every case, producing a finer product means doing more work in the final, or finishing, stages. It takes no more wool or cotton, and therefore it takes no more agricultural labor, to make fine than coarse clothing. The difference is mainly in the amount of work which is put upon the material after it leaves the farm. In other words, of the total work put upon material for fine clothes, a smaller proportion than for coarse clothes is outdoor labor and a larger proportion is indoor labor. The same principle applies to shoes, furniture, vehicles, and many articles of food.

Another and more important fact is the increased use of agricultural machinery. Fewer men are now needed in the actual cultivation of the land, as some of the work is done in the factories where farm machinery is made. Whereas all the men who formerly helped in the harvesting of a wheat crop actually worked in the field, now some of them work in the shops and factories making harvesting machinery. The same change has taken place with respect to many other kinds of farm work.

Influence of occupation on character. There is one leading industry in which success depends primarily upon the ability to deal efficiently with nature and natural forces; that is, farming.

A LARGE DAIRY FARM IN CALIFORNIA

Milk is the most economical animal food known. A good dairy cow will provide more food in a year than a beef animal will produce in three years

In most of the others success depends quite as much on ability to deal with other men as on ability to deal with nature. They who get their living out of the soil must know the soil, the weather, the times and seasons, and everything that will affect their success, whereas they who get their living by dealing with other men must know the ways of men.

Commercial agriculture. Self-sufficing agriculture has become a thing of the past, and we are developing what may be called commercial agriculture; that is, a system of agriculture in which the farmer is a buyer and seller, a dealer with other men, to almost the same extent as a city business man. He must now understand not only markets but political and social conditions. This is tending to diminish the differences between the dwellers in the city and the dwellers in the country.

The independence and dependence of the farmer. We are hearing constantly reiterated, especially by advocates of the back-to-the-land movement, that the farmer is the most independent person in the world. Probably no one is so dependent upon outward physical conditions as the farmer. He must continually watch the weather and guard against pests of all sorts, animal diseases, and even town marauders. Every year lightning, hail, wind, and floods destroy crops in some part of the country. On the other hand, the indoor worker is constantly harassed by troubles of human origin, such as political elections, commercial crises, changes of fashion, the organization of dangerous trusts and monopolies, labor troubles, and advertisers.

One important characteristic of agricultural industry is its dependence upon the seasons. The indoor worker is frequently able to continue uninterruptedly in one kind of work, week after week, month after month, and year after year. From the very nature of the case this is impossible in agriculture, for every crop has its growing-season and its time of harvest. On every farm almost every hour of the day has its own special work to be done, so that work is continually changing, not simply from season to season, from month to month, and from week to week, but even from hour to hour.

FARMING UNDER GLASS

Making the most of the land by using a great deal of labor

Country people generally self-employed. Perhaps the most important fact concerning agriculture is that a very large proportion of those engaged in it are self-employed, whereas the vast majority of those who live in cities are employed by other people. The fact that farming is an industry of small units, while indoor industries are generally industries of large units, produces this difference.

Some of the deepest students of political and social tendencies have come to doubt whether democracy can ever develop to a high stage of efficiency except among people who are in the main self-employed. It is true that modern democracy arose first in the cities and towns, but it is likewise true that at that time the cities and towns were the homes of self-employed men. Before the rise of the factory system such manufacturing as was done was carried on in small shops by craftsmen who were in the majority of cases self-employed. The rural districts, however, were under the feudal system.

Conditions are exactly reversed at the present time. Under the factory system the great majority of people in the indoor industries work under bosses. Since the break-up of the feudal system and the rise of the one-family farm, which is the characteristic farm in this country, the average dweller in the country is his own boss. This may have something to do with the fact that city politics is run by bosses and country politics is not.

Interdependence of the sexes. The division of labor between the sexes is much more marked, of course, in agriculture than in indoor industries. There are many operations on every farm which require the superior muscularity of the male. This makes it difficult for women to compete with men in general farm work. At the same time, the fact that the farms are so far apart makes it impossible for these muscular males to get along without women to run their houses. The men cannot live in boarding houses, because that would make it necessary to live too far from work. Consequently one finds in our rural districts fewer old, unmarried males than one finds infesting our cities and towns. Moreover, there are comparatively few opportunities for a woman to make an independent living in the country.

Forestry. Forestry as distinct from lumbering has only recently received attention in this country. In order to be an economic success, forestry must obviously be practiced on land which would produce a greater value at lower cost when planted to trees than when planted to anything else. Mountainous and semimountainous lands, stony or swampy lands, and lands which for other reasons are unsuited to tillage or pasturage furnish the natural opportunity for the practice of forestry on a large scale. While the annual product in the form of the annual timber growth is small, the cost is likewise small. Since such land would otherwise go to waste altogether, it is better to get even a small product than none at all.

Scientific forestry. In recent years the federal government and several of the states have created forest reserves. Scientific forestry is being practiced, but it must be remembered that scientific forestry in this country is necessarily different from what it is in old countries. In a country where lumber is still cheap, as compared with other countries, and where labor is dear as it is in this country, one cannot do in the name of science what one can do in an old country, where lumber is dear and labor cheap. A serious problem for the American forester is to keep costs down; unless he does this he may find that the timber is not worth what it costs to grow it. For this reason it is not the custom in this country to do much planting of trees or preparation of the ground. The work is mainly confined, first, to cutting out undesirable growths (in order to give the more desirable trees, which are in the main self-seeded, a chance to grow) and, second, and more important still, to guarding against forest fires. Our summers, which are dry compared with those of Europe, make the forest fire the great enemy of the American forester. The fight against diseases and pests is a third task.

Fish culture. Fish culture has been fostered by the federal and state governments of the United States and by various private agencies. Spawn is collected and hatched, and millions of young fish are distributed in our streams and along our seacoasts. A great deal of study is being given to the habits of various edible

SCIENTIFIC FORESTRY

Starting young trees in partial shade. When our natural forests are exhausted we must grow timber as we do other crops

CLEAN LUMBERING

fishes and the sources of their food. Private enterprise is also active in stocking streams and small bodies of water and in growing fish of various kinds for the market.

With our Great Lakes on the north, the ocean on the east and the west, and the Gulf of Mexico on the south, and with all our noble rivers, we have access to such vast and seemingly inexhaustible supplies of fish that fish culture in a strict sense has not developed very far among us. Hatching and distributing spawn, and leaving the spawn to shift for itself and take its chances along with other wild fish, is a step in the right direction, but it stops far short of the work of the animal breeders on our farms.

Summary. Our particular branch of the human race has been, for many generations, a pioneering and colonizing race. It has been spreading over new and sparsely occupied areas, in which natural resources, such as virgin forests, mineral deposits, wild game and fish, and excellent grass for pasturage, have abounded. A considerable part of its living has been derived from the mere appropriation of these natural resources. When the time comes, as in the natural order of things it soon must, when there are no more new and sparsely occupied lands to colonize, the extractive industries must decline in importance as a part of our national economy. Then we must depend more and more upon the genetic industries for subsistence and for raw materials. This growing importance will justify our giving more and more attention to these industries.

EXERCISES

1. What are the genetic industries?

2. Why are genetic industries generally outdoor industries?

3. How do the outdoor industries affect the lives of the workers as compared with the way in which the indoor industries affect them?

4. What are the leading stages in the progressive economy of land?

5. What is tillage?

6. What is the law of diminishing returns?

7. What is the law of variable proportions?

8. How does agriculture compare in size with other industries (1) in the world at large? (2) in your part of the world?

A MODERN FISH HATCHERY

9. Is agriculture gaining or losing ground as compared with the indoor industries? Why?

10. What is meant by commercial agriculture?

11. Why are politics generally in a better condition in country than in city communities?

12. Are women more independent or less independent in the country than in the city? Why?

13. Why is scientific forestry in this country different from scientific forestry as practiced in older countries?

14. How is fish culture carried on in the United States?

CHAPTER XVIII

THE MANUFACTURING INDUSTRIES

Various types of manufacturing establishments. One kind of manufacturing establishment which is still numerous and widely distributed is the small shop where the worker owns his own tools and equipment, buys his own raw materials, and sells the finished product. It does not constitute much of a change, certainly not a revolution, when he hires a few helpers or apprentices to assist him. They work with his tools upon his raw materials, and they receive their compensation in the form of wages instead of in the form of a share of the profits of the business. Even where the owner ceases to do any of the work except to keep the accounts, buy the raw materials and sell the products, and exercise general supervision and management, the transition may have been so gradual as to attract no one's attention. By this gradual change, however, a type of manufactory may be developed which is very different from that with which manufacturing began.

But the transition is not always made in this way. Other methods of organization have existed at various times and still exist. In one class of shops the worker owns his own tools and runs his own shop, but does not own the raw materials upon which he works. These are furnished by an outside person who supplies them and owns the finished product, paying the worker a price agreed upon for the work which he does. In this case also the worker may hire a few helpers or apprentices.

Still another method is found, where the worker owns neither the materials upon which, nor the tools with which, he works. A third person supplies both materials and tools,—everything, in fact, except the place in which the work is done, which place the laborer himself supplies.

American Museum of Natural History, New York

PRIMITIVE MANUFACTURING

Great manual skill and dexterity, but little mechanical inventiveness and little accumulation of capital; that is, of tools and machinery

THE INSIDE OF A MODERN FACTORY

Manual skill and dexterity combined with mechanical inventiveness and, what is equally important, considerable accumulations of capital; that is, of the products of past labor and ingenuity

In the modern factory, however, everything is assembled in one building or group of buildings, around one power plant; everything is owned by one group of individuals, and the laborer furnishes nothing except his own skill and strength. The great advantage of this system is its economical use of power. Wherever a large use of power is necessary, it is important that it be effectively and economically utilized. In all such cases the modern factory tends to displace all other methods of manufacturing. Where comparatively little power is required, and where, therefore, it is not of such great importance that power be economized, other methods still survive. In some cases, however, the competition of the factory is so severe as to force the workers in the small shops to work for very low wages. Where the main factor in success is the skill of the worker rather than cheap power, the small shop will probably continue to compete successfully with the large factory, but where cheap power is the main factor, the large factory will probably drive out the small shop.

Tendency toward large-scale production. The stages of this development from the very small shop to the factory are by no means clear. Almost every form of manufacturing will be found in every stage of economic development. The large factory has come to be the dominant form only since the invention of power-driven machinery. The Industrial Revolution, as it is called, was the rather sudden growth of the factory to this dominant position during the latter half of the eighteenth century.

Power-driven machinery and large-scale production. A remarkable series of inventions followed one another in rapid succession and transformed several of the large industries of England into factory industries. These changes put England definitely in the lead as a manufacturing nation. The same revolution came in other countries a little later.

Says Marshall[1]:

> The quarter of a century beginning with 1760 saw improvements follow one another in manufacture even more rapidly than in agriculture. During that period the transport of heavy goods was cheapened

[1] Alfred Marshall, Principles of Economics (4th ed.), p. 42. London, 1898.

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ROLLING MILL AT WORK

SPINNING BY HAND, ALMOST A LOST ART

A SPINNING-ROOM IN A MODERN COTTON MILL

by Brindley's canals, the production of power by Watt's steam engine, and that of iron by Cort's processes of puddling and rolling and by Roebuck's method of smelting it by coal in lieu of the charcoal that had become scarce; Hargreaves, Crompton, Arkwright, Cartwright, and others invented, or at least made economically serviceable, the spinning jenny, the mule, the carding machine, and the power loom; Wedgwood gave a great impetus to the pottery trade that was already growing rapidly; and there were important inventions in printing from cylinders, in bleaching by chemical agents, and in other processes. A cotton factory was for the first time driven directly by steam power in 1785, the last year of the period. The beginning of the nineteenth century saw steamships and steam printing presses, and the use of gas for lighting towns. Railway locomotives, telegraphy, and photography came a little later. Our own age has seen numberless improvements and new economies in production, prominent among which are those relating to the production of steel, the telephone, the electric light, and the gas engine; and the social changes arising from material progress are in some respects more rapid than ever. But the groundwork of the changes that have happened since 1785 was chiefly laid in the inventions of the years 1760 to 1785.

Decay of small industries. Scarcely less striking would be an account of the rise of machine production in other industries, following the use of steam power and cheap iron and steel. Shoe manufacturing, the grinding of flour, the slaughtering of meat animals and the curing and packing of meat, the manufacture of watches, automobiles, etc., and various other industries have shown the same tendency toward the factory system of production. Regarding changes in our own country Professor Ely writes[1]:

> Let the reader call to mind the many things in our economic life which the world never saw before. He will, of course, think at once of the railway and of steam navigation, and of other applications of steam to industry. But these have brought other important new phenomena. The concentration of large masses of working-people in great factories of which they own no part, and under a single employer, such as we see daily, is something new for skilled mechanics; not that nothing of the kind ever existed before, but its existence is so much more common and affects so many more people that in its

[1] Richard T. Ely, An Introduction to Political Economy, pp. 55–57. New York, Chautauqua Press, 1889.

social aspects it is new. In the last century, and in previous centuries of the Middle Ages, artisans owned the tools which they used, and after they had fully mastered their trades usually called no man master, but worked in their own little shops. Even within the memory of the author, still comparatively a young man, this condition of things has become less common. The smith, under the spreading tree, of whom Longfellow sang, is disappearing. He has left the crossroads in the little village and now works in a machine shop. His friends, the carpenter and the shoemaker, have accompanied him. A few artisans may stay to do repairing and other small work, but the cheaper processes of vast establishments have rendered this migration inevitable for the many. Only the few among artisans can live in the old style.

Tendency of mechanically expert nations toward indoor industries. Large portions of the world's population still remain in a condition of mechanical inexpertness. They find it more advantageous to live from the products of the soil, exchanging these products for the manufactured products of the mechanically expert. Other populations, like those of our own West, while mechanically expert, occupy land of such abundance and fertility as to enable them to prosper more by cultivating land than by turning to indoor industries. They use their mechanical expertness in contriving and operating farm machinery. They exchange their large surplus of farm products for the manufactured products of other people who are also mechanically expert and who occupy lands of less extent and lower fertility. The latter, not having vast areas to cultivate, find less profitable opportunities for their mechanical expertness out of doors than indoors. Therefore they develop the indoor industries. England, which got a good start ahead of the rest of the world in this line of development, prospered amazingly. The eastern part of the United States, together with France, Belgium, Holland, and lately, Germany, has been following in the same direction.

Taking the United States as a whole, it is rapidly ceasing to be primarily an agricultural country and is becoming a manufacturing country, following a similar development in England and northwestern Europe. Canada, South America, Australia, South Africa, and all countries where white men colonize will doubtless follow

in the same direction. There will then be left only the tropics in which to sell the surplus products of manufacture and from which to draw the surplus products of the soil. It is probable that the development of the indoor industries will be checked before that state is reached. In that case each country will have to preserve a balance, or equilibrium, between the indoor and the outdoor industries.

Why more work has to be done indoors. As pointed out in the chapter on the Genetic Industries, the advance in civilization and the general improvement of living conditions tend to add to the relative importance of the indoor as compared with the outdoor industries. The finer the goods we demand, the more work we make, generally speaking, for the indoor workers. Even farm work itself comes, in a sense, to be done indoors rather than outdoors. The substitution of the tractor for the horse may serve to illustrate this statement. The raising of horses is outdoor work; the manufacturing of tractors is indoor work. If we use more tractors and fewer horses a larger proportion of our workers will work indoors and a smaller proportion outdoors.

This is a process which must be expected to continue even though we remain a self-sufficing nation. If, ceasing to be a self-sufficing nation, we bring raw materials and products of the soil from distant portions of the earth and send in exchange the more refined products of the indoor industries, we must expect that manufacturing will become in larger and larger degree our dominant occupation. This will bring in its train many consequences of a very perplexing nature. Our people will more and more take on the characteristics of an indoor people.

Dependence of manufacturing upon transportation. Another most important consequence of the development of manufacturing as our dominant industry will be the growing importance of transportation. If we are to turn to the indoor industries and depend upon distant regions of the earth for the products of the outdoor industries, obviously we must find cheap and efficient methods of sending our products to those distant regions and of bringing their products back.

EXERCISES

1. What kind of a picture do you have in your mind when you think of a factory? Is this the only kind of factory? What are some of the other kinds?

2. What are the main reasons why large factories have tended to displace small shops? Do these reasons apply to each and every kind of manufacturing?

3. Why do some nations develop indoor industries more rapidly than others?

4. Why does more and more work tend to be done indoors rather than outdoors?

CHAPTER XIX

TRANSPORTATION

Moving things over long distances. Since all industry consists in moving materials from one place to another, it follows as a matter of course that transportation must form an important part of the industrial system. The transportation system has been likened to the veins and arteries of the human body, just as the telegraph and telephone systems have been likened to the nerves.

Interdependence of manufacturing and transportation. The development of the factory system as described in the preceding chapter, and of large-scale production in general, would have been impossible without cheap transportation.

> The railway and the factory have gone hand in hand in their development and in their economic results. With the means of transportation which existed two hundred years ago large industries would have been impossible. The substitution of turnpikes for common roads, of canals for turnpikes, and of railways for canals was as essential a part of industrial progress as was the development of the factory system.[1]

Without a wide market on which to sell its large product a large factory or manufacturing establishment would be an impossibility. In the days of restricted local markets, when each little community was almost self-sufficing, small shops having individual handicraftsmen could supply the needs of each such market. Not the least important of the changes which have come about since the middle of the eighteenth century have been the removal of the barriers which divided one restricted market from another and the creation of nation-wide or world-wide markets, instead of a series of local, restricted markets.

[1] President A. T. Hadley, Transportation, in Palgrave's "Dictionary of Political Economy."

The widening of the market. Cheap transportation, more than anything else, has made possible the development of nation-wide and world-wide markets. Raw materials sometimes have to be brought long distances, especially in a case where several different kinds of raw material enter into the making of a given product. These different kinds of raw material are not always found in the same neighborhood. The iron ore of the Lake Superior region would be practically useless, because of its distance from the coal fields, were it not for cheap transportation on the Great Lakes, by means of which it can be carried almost to the mouths of the coal mines of Illinois, Indiana, Ohio, and Pennsylvania.

In other cases the raw material itself is produced over such wide areas as to make centralized and large-scale production an impossibility without cheap transportation. The slaughtering of meat animals and the curing and packing of the meat is a case in point. These animals must be grown on the farms and ranges which cover considerable areas. Without cheap transportation they would have to be slaughtered and consumed nearer the sources of production; with cheap transportation they may be sent to a few large packing centers, and from these centers the meat can be distributed over practically the whole country and over considerable portions of the civilized world. Without cheap transportation every large city would be dependent upon the supply of meat that could be grown within driving distance; that is, within such distances as the animals could travel on foot. They would have to be slaughtered near each center of consumption in order that the meat might be distributed economically.

However great the economies of large-scale production may be, if the cost of transportation were as great as it once was the small producer, using locally produced raw materials and selling on a local market, would save so much on the cost of transportation as to give him an advantage over the largest factory located a long distance away.

Water transportation developed first. Historically, water transportation was cheapened long before we had cheap land

transportation. Consequently we find that commerce in a large sense developed first on the water. Great cities were located where there were advantages in water transportation. Some considerable cities, however, developed along overland routes. Damascus and Palmyra in western Asia, Troyes and Nuremberg in Europe, may be cited as examples. But most of the great cities developed along water routes; Canton, Hankow, Calcutta, Delhi, Nineveh, Babylon, Bagdad, Tyre, Constantinople, Memphis, Alexandria, Venice, Genoa, Antwerp, and London may be cited as examples.

Water transportation developed first, of course, where it was safe; that is, on rivers or small bodies of inclosed water. The great rivers were the first great routes for cheap transportation. The valleys of the Nile, the Euphrates, the Tigris, the Ganges, and the Yangtze developed great civilizations, partly because they contained good soil and opportunities for irrigation but also because they furnished means of transportation.

The keel and the compass. The next stage was reached when the sailors ventured beyond the mouths of the rivers along the adjacent coasts and in inclosed seas like the Ægean, the Mediterranean, and the Baltic. The difficulty of navigation in those days was such as to make an ocean voyage extremely hazardous, if at all possible. The boats of the earliest days were flat-bottomed—that is, they had no keels; it was therefore impossible to sail in the teeth of the wind. Sails could be used only when the wind was favorable; that is, when it blew almost in the direction in which the sailors wanted to go. At other times they had to depend upon large numbers of oars worked by human muscles. The galley slave was a part of that system of transportation. With the keel boat and the mariner's compass the use of sails was greatly enlarged, and sailors could venture out on the open ocean.

The world faces the ocean. As a result of the discoveries of Columbus, Vasco da Gama, and others, the world is said to have faced about. The various nations had formerly faced inward, with their backs to the ocean; the land united peoples, but the ocean divided them. Since that time they have tended to face outward—that is, to face the ocean; and it is now said that the

land divides, but the ocean unites. While distances are great over these ocean routes, the building of larger ships propelled either by steam or by wind has made ocean transportation the cheapest of all forms. Where time is not a factor the huge sailing vessels can carry freight thousands of miles at a lower cost than it can be carried hundreds of miles even on our best railways. Where time

THESE CHINESE PORTERS CARRY ENORMOUS LOADS ON RACKS WHICH ENABLE THEM TO REST WITHOUT UNLOADING

is a factor the ocean cost is slightly greater, but still ocean freight rates are amazingly low. The question of economizing power and that of economizing time seem sometimes to come into conflict. The sailing vessel is the greatest economizer of power, but it is not economical of time.

Land transportation. The most primitive trade routes were probably paths traversed by human beings carrying their own loads. Beasts of burden were, however, utilized very early for

this purpose. The accounts of early explorers in Central Africa describe the great forest as penetrated by a network of paths running from one village to another, so that a traveler could cross the continent by persistently following these paths. The great caravan routes across the desert and open country made use of animals as beasts of burden.

Wheels. A wheeled vehicle is a great advance over the carrying of loads on the backs either of men or of animals. In some of the backward districts of China porters still carry huge loads, and it is amazing what loads a man can carry who has been trained to it all his life. But where the road is made suitable for wheeled vehicles the porter can haul about three times as much on wheels as he can carry. On a paved street or a macadamized road in this country a pair of good horses will haul from two to four tons, whereas about six hundred pounds is a load for one pack horse. Even on the common dirt roads of the country, when they are reasonably well kept and not muddy, a pair of horses will haul from a ton and a half to two tons.

Tracks. It is interesting to note how every advance in methods of transportation seems to depend upon the quality of the road or track. Wheeled vehicles could be substituted for packsaddles only when there were roads suitable for wheeled vehicles. Well-kept roads and paved streets are necessary before mechanical power can be substituted for animal power in ordinary hauling. The acme of track building is the railway, where the wheeled vehicle runs on steel rails. The friction and loss of power between the wheel and the track is reduced to the minimum. In a similar way the modern locomotive is the climax of the development of mechanical power. The powerful engines of today, however, could scarcely run on the old-fashioned railway track, with its light iron rails. Improvement in the manufacture of the steel rail has had to go hand in hand with the improvement of the locomotive engine.

Railways. In no country has the development of the railway quite kept pace with its development in the United States, though in proportion to their need for railway transportation England and France have kept close behind us. In addition we have had an

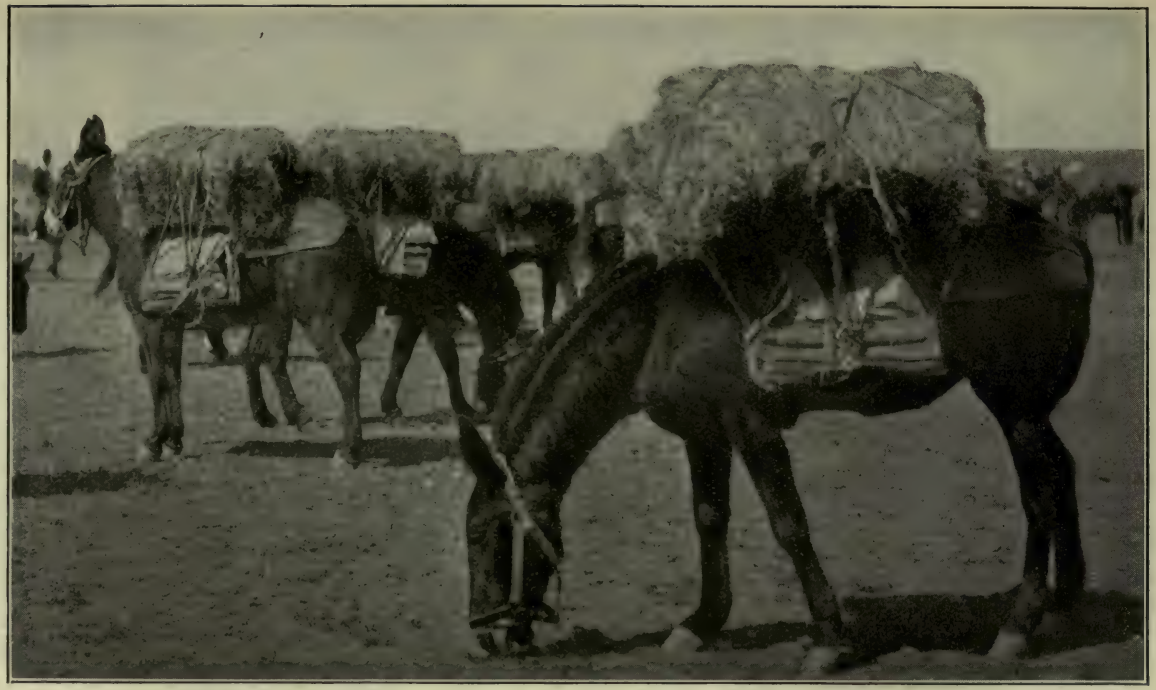
TRANSPORTATION ON THE BACKS OF ANIMALS IN PALESTINE

Poor roads make wheeled vehicles impossible

abundance of material for railway construction. Moreover, our people have shown a great deal of initiative and enterprise in pushing the business. In some countries this spirit of enterprise has been so lacking that the governments themselves have had to take hold of the matter and build the roads at government expense.

Public or private railways. The problem of railway management, however, has been a very difficult one in every country. In one sense the railway system would seem to belong to the general system of streets, roads, and highways. The general experience of mankind has shown that streets, roads, and highways should be public rather than private. This has led to the assumption that railways should be treated similarly. There is, however, this important difference. On the streets, roads, and highways private individuals use their own vehicles, travel freely, and go and come when they please. The actual work of transportation, therefore, is not carried on by the public. This method would be impossible on a railway. The trains must run on schedule time and under a well-administered system; otherwise there would be nothing but confusion and inefficiency and multitudinous wrecks. If the public undertakes to own the railways it would have to go much farther than it does when it owns the streets and highways. It would either have to operate all the vehicles (that is, trains) or lease the road to a single company which would have the exclusive use of the tracks.

There are therefore two analogies which may be drawn between the highway system and the railway system. Since the government owns the highways, one group of people, reasoning by analogy, say that the government ought to own the railways. On the other hand, it is asserted that since private individuals operate the vehicles that are used on the highways, and the government is not in the transportation business at all, a similar rule should prevail with respect to railway transportation; private individuals or companies should do the hauling and therefore own the railway. In this country we have followed the latter principle, but it has made necessary a considerable regulation of the companies which do the hauling. A third possibility is for the government to build and own the tracks and then lease them to operating companies.



ARMY MULES CARRYING RATIONS FOR THEMSELVES AND THEIR FELLOWS

Monopolistic character of a railway. From the very nature of the case a railway must be operated as a monopoly or quasi monopoly. It would be impossible for even two companies to run trains on the same track or over the same railway system unless one became absolutely subject to the administrative rules of the other. This quasi-monopolistic character of the railway has given the management more control over rates than individual draymen, freighters, cabmen, etc. can exercise over freight and passenger rates in the vehicles that are operated on public highways. In order to hold in check this quasi-monopolistic power of the railway, a great deal of legislation has been enacted in this country.

Short-distance and long-distance hauling. In several countries, such as Germany, Switzerland, Australia, and others, the opposite alternative has been chosen. The government has built and continues to operate the railways. In Germany railroad building was primarily a military enterprise. In order that she might build up her military power and be able to concentrate vast armies and supply them at any point, she needed a well-articulated railway system. In this respect her policy resembled that of the Romans, who were great road builders in their day. Their system of roads enabled them to march their armies rapidly from one part of the Empire to another, to concentrate wherever concentration was needed, and thus to outmaneuver their enemies.

As to the effects of the two systems on peaceful commerce, there are many different opinions. No railway system in the world compares with that of the United States in the cheapness and swiftness of long-distance freight. Our railways, however, have given comparatively little attention to local freight. In the efficiency and cheapness with which local freight is handled they are far behind the railroads not only of Germany, where the government owns and operates the roads, but also of England, where they are operated by private companies.

The difference is probably not to be accounted for on the ground of public or private ownership. In a densely populated country, where the distances are never very great, it would be quite natural that short-distance, or local, freight should form a large part of the

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TRANSPORTATION UNDER IDEAL CONDITIONS, WHERE SPEED, SAFETY, AND PLEASURE ARE COMBINED

business of the railroad; whereas in a country of such vast expanse as ours it would be equally natural that long-distance freight should form the chief part of the railroad business. Each railway system therefore tends to specialize in that field where its chief business lies.

Arguments against both sides. No final conclusion is possible as to the relative merits of public and private management. As Sir Roger de Coverley was in the habit of saying, "Much might be said on both sides." The arguments against private ownership and operation are based mainly on the monopolistic character of the railroad business, the rapacity of railroad managers, and the general distrust of "big business." The arguments against public ownership and operation are based mainly upon the inefficiency of public business, the danger that politics rather than business needs will determine rates and other details of the business, and the general distrust of the politician.

These considerations might very properly convince one that the same system is not necessarily the best for all countries. In a country which is dominated by autocratic and military standards, where business is contemptuously spoken of as "shopkeeping," where government service attracts a better class of men than business attracts, and where men are chosen for high positions not because of their talkativeness or popularity but because of their knowledge and efficiency, the objections to public ownership and operation are weak and those against private ownership and operation are strong. In a country, however, which is dominated by democratic ideals, where business and all honest occupations have always been regarded as just as honorable as government or military service, where, on the whole, business attracts a better class of men than politics, and where men are chosen for high public positions mainly on the ground of their ability to make stump speeches rather than on the ground of their knowledge and efficiency, the objections to government ownership and operation are very strong and those against private ownership and operation are relatively weak.

EXERCISES

1. In what sense does transportation differ from other work, since all work consists in moving materials?

2. Would our modern system of manufacturing have been possible without improved means of transportation? Why not?

3. What effect has cheap transportation had on the size of markets?

4. What kind of transportation developed first?

5. What were some of the early inventions that helped to improve transportation?

6. What kinds of transportation are now cheapest?

7. What are some of the reasons in favor of public ownership of the railroads?

8. What are some of the reasons in favor of private ownership?

9. Is there any final answer that applies to all countries and all times?

CHAPTER XX

MERCHANDISING AND THE PROFESSIONS

Personal utility. In a previous chapter it was pointed out that three kinds of utility are produced by human industry,—form utility, place utility, and time utility. It would be possible, if one cared to draw somewhat finer distinctions, to speak of personal utility as a fourth kind. When an object is transferred from a person who has little use for it to a person who has a greater use for it, its utility, or power to satisfy desires, is increased by the transfer, just as truly as though it were transferred from a locality where it was not needed to a locality where it was needed.

There is an ancient fallacy to the effect that someone must gain and someone must lose in every trade. Two farmers may trade horses and both gain. A potato grower who has a surplus of potatoes and a shoemaker who has a surplus of shoes may exchange products to the advantage of both.

Merchandising may be productive of utility. If it is agreed that the power of goods to satisfy wants is increased when those goods get into the possession of the people who really need them, it ought not to be difficult to see that the individual who helps on this process is a productive individual. Even if we leave transportation and the storing of goods out of account and merely consider the transfer of goods from one person to another in the same locality, we shall find that unless there were merchants or mercantile houses the various producers would find difficulty in making the necessary exchanges. The farmer with a surplus of wheat might have some difficulty in finding a shoemaker who wanted wheat and was willing to exchange shoes for wheat. Under a highly developed mercantile system a farmer can always find buyers for his wheat. He can also find a shoe store where he can buy shoes, a clothing store where he can buy clothing, and so on.

These men who specialize in trading are sometimes called middlemen, and it is not difficult to see that they are not only exceedingly useful but in some cases absolutely necessary. An immense amount of time and trouble are saved when every producer can sell directly to a middleman and go on about his work of production, while at the same time every consumer can purchase exactly what he wants from some merchant.

The middleman as a timesaver. Generally speaking, it will be observed that in any community where the average person considers his time to be valuable, there are a great many middlemen intervening between producers and consumers, and very little direct marketing. In a community, however, where wages and incomes are low and the average person finds his time of very little value, there is a great deal of direct bartering between producer and consumer. The open market place, where producers and consumers meet, flourishes in communities of the latter type but not in communities of the former type.

"Time is money." There is an old adage that time is money. Where time is valuable it is economized; where it is of little value it is not economized. Where the average housekeeper considers her time valuable she does not care to spend much time marketing and dickering with producers who bring their stuff to market. She prefers to market by telephone. This is a great saving of time, but it is generally expensive in terms of money. The problem in economy which every producer and every consumer must decide for himself is whether his time is worth as much as the money which he might otherwise save. It is the belief, however, of many students of the problem that the Americans have gone too far in the direction of saving time,—so far, in fact, as to waste more money than necessary in middlemen's costs and profits.

Marketing sometimes a social function. Another factor enters into the success of public markets, where producer and consumer meet. In those countries where the system still prevails, going to market has become a social function. The market place is the place where citizens meet and where the women make their

social calls and pay their social obligations. This phase of the question has played a very important part in history. The Roman Forum, for example, was simply the market place, in which the farmers from the surrounding country and the people of the city of Rome met, primarily for purposes of exchange and secondarily for purposes of social intercourse and political discussion. The latter functions gradually displaced the former, and the Roman Forum gradually became the center of Roman politics and eventually the center of the world.

Buying large quantities and selling in small parcels. Another very important function performed by the mercantile house is that of receiving products in large quantities and dividing them into small parcels for the consumer. This meets the convenience of both producer and consumer. The convenience of the producer is met by his ability to sell in bulk; the convenience of the consumer is met by his ability to buy in small parcels.

Storing goods. One of the most important functions of the mercantile class, however, is that of storing goods. In fact, it is still customary to speak of certain mercantile houses as stores. The storing of goods produces time utility. They are kept from a time when they are not especially needed until a time when they are. Their utility is thus increased. This function of storing goods is particularly important in the case of goods which are produced by a seasonal industry, such as agriculture. The wheat is harvested during one period of the year, but needs to be consumed during the entire year. Unless someone were ready to store this product, it would have to be used very inefficiently at one period of the year, and there would be a scarcity at another period.

Utility of storing without monopolizing. Contrary to a certain popular belief, the effect of storing vast quantities of farm products in warehouses is beneficial rather than otherwise. No speculator or warehouse owner would have any motive for storing products except that of getting a higher price later. He could not get this higher price unless the goods grew scarcer. If they grow scarcer later, it is very much to the interest of society that they be stored rather than consumed at once.

At a time when prices are very high anyway and it is found that a great deal of grain is being stored up there naturally develops a certain popular dissatisfaction. Being shortsighted, we do not appreciate what is likely to be our situation several months hence. The only thing we see is that prices are now distressingly high. We see this in connection with another fact, namely, that large quantities of grain are being stored. We think, naturally enough, that if that grain were taken out of storage and sold at once, prices would not be so high at the present moment. If, however, we were a little more farsighted we should look ahead and consider what the situation would be later. If grain is to be more abundant then than now, the price will fall. If that were the expectation nobody would be willing to store a single bushel of grain until that time. Everybody who had wheat would want to sell it as soon as possible.

If those who are in a position to judge believe that wheat will be scarcer in December than in September, and the price therefore higher, they find it to their interest to store it up. If they are correct in their anticipation it is very important for society at large that they, or somebody, should store up wheat; otherwise we should consume wastefully in the autumn and go hungry in the winter. It ought not to take very much forethought or reasoning power to understand this. It is, however, a sad commentary on the shortsightedness of many of our people that this is so imperfectly understood and that we are so often resentful toward those who are performing this important function of storing.

Another fact which should be taken into consideration is that formerly large numbers of people, both producers and consumers, did their own storing, whereas at the present time that work is turned over to a special group of men who own elevators, cold-storage warehouses, and other storage facilities. While both producer and consumer are turning this work over to a special class, they must not forget that the only motive which this special class has for doing this special work is the hope of a profit. If they can give the service cheaper than producers and consumers can furnish it for themselves, they have earned a profit.

Cornering, or monopolizing is destructive of utility. We should be careful, however, to distinguish between storing for sale on a competitive market and monopolizing for sale on what is known as a cornered market. If there were collusion among all those who own warehouses or who are in a position to store products,—an agreement to control the supply and fix prices arbitrarily,—there would be a real grievance. But if we can once satisfy ourselves that there is no collusion or attempt at monopolization, that the products are being stored for sale on a competitive market, we can rest perfectly easy in our minds, because no one could make any money by storing in this way unless it were genuine social service to do so. By social service, of course, we do not mean philanthropic service, but merely useful work.

Standardization. Another very important function performed by the mercantile class is what is known as the classification or standardization of goods. The producer of farm products cannot produce goods of uniform kind and quality. On every apple tree there will be apples of various grades and in every large orchard likewise. In every poultry yard there will be fowls of different qualities. The consumer who tried to purchase directly from the farm might not find exactly the grade or quality which he desired. When the farmer sells his products in bulk the middleman will frequently classify or grade them into a large number of grades. Each hotel and restaurant and every private consumer can get from such a dealer exactly what he wants. Multitudes of other illustrations could be given, but enough has been said to show that merchandising is a very important factor in the economy of human energy and the promotion of national prosperity.

Deception always destruction. It is quite probable, however, that certain practices will grow up in connection with merchandising which are injurious. There is probably no other branch of human industry or business which lends itself so easily to deception and adulteration and furnishes such temptations to high-pressure advertising and salesmanship. The arts of persuasion are developed to a high degree of proficiency and easily develop into

the arts of deception. It is not necessary to present any arguments to show that deception contributes nothing to national prosperity.

Advertising. Advertising occupies a prominent place among the forms in which the art of persuasion is carried to a high state of development in modern times. To what extent advertising is economically justified has been a difficult question and must remain so. Advertising is sometimes educational. The individual sometimes learns from advertisements where he can get something which he really wants and has wanted for a long time. This applies, however, mainly to new products that have recently been put upon the market. One scarcely needs an advertisement to tell one of the existence of soap or codfish or to acquaint one with the fact that such things are to be purchased at stores. In many cases of this kind the only effect of advertising is to persuade the consumer to use one man's product rather than another's, and no addition whatever is made to the national wealth or to the well-being of society.

Causing productivity in others. Falstaff said, "I am not only witty in myself, but the cause that wit is in other men." There are many men and women in every community who are not directly producing wealth but who are the cause of productivity in others. The teacher who trains students in the productive arts is, to say the least, a cause of productivity and becomes a contributor to national prosperity. The singer, the poet, and the artist who inspire to strenuous action and noble deeds likewise contribute their share to the greatness of the nation. The military band is a part of the fighting strength of the army, even though its members never handle a destructive weapon of any kind.

The social function of art, religion, etc. A great French artist, when he found his country in the throes of the life-and-death struggle which began with the invasion of 1914, speaking before a gathering of French artists, said that in that crisis no art would be tolerated "which was not noble, robust, proud, and an inciter of high thoughts and delicate sentiments—an art of heroic joy." Facing the future, he continued: "You would not tolerate anything less today. Then why should you tolerate anything less

hereafter, in that tomorrow when our duties shall be changed?" Here was a full acceptance of the view that art has an end beyond itself and is not its own excuse for being.

Government. The officers of the government who preserve order and protect lives and property contribute a large share to national prosperity. An army, whose business may seem to be destruction rather than production, by protecting against invasion from without and insurrection and disorder from within, may be an indispensable factor in prosperity.

It is of course possible to have too many so-called nonproducers, not only in the army but in public offices of different kinds, as well as in the various talking and ornamental professions. The work of the soldier, for example, is one of the most honorable of all professions so long as national defense is necessary; but even the professional soldier himself will generally agree that it would be an excellent thing if war could be eliminated and the work of the soldier made unnecessary. The same reasoning may be applied to many other occupations.

Wherein labor contributes to national prosperity and wherein it does not. There is a very important distinction between labor which contributes to the well-being, prosperity, and greatness of the nation and that which does not. Labor may produce a commodity which sells for a high price on the market,—which satisfies an intense desire which people will pay a high price to have gratified; and yet if the desire is a vicious one, if its gratification weakens in mind or body those who buy it, or if it merely incapacitates them temporarily for useful work, that labor would have to be classed as unproductive. On the other hand, the labor of the musician, the poet, or the preacher, if it does not tend to produce softness but inspires to strenuosity and productivity, if it rationalizes the consumption of wealth, if it makes people desire the right things, would have to be classified as highly productive.

Professional and personal service. All labor which is not engaged in the production or handling of material commodities which are bought and sold on the market is grouped in various census reports and other public documents as professional and

personal service. Professional service is limited to a few learned or highly skilled occupations such as law, medicine, theology, teaching, governing, acting, etc. Personal service includes such a multitude of occupations as would fill a small catalogue. Barbers, bootblacks, valets, domestic servants, and all others who render their service directly rather than indirectly through the medium of a material product, may be said to render personal service. If it is genuine service, whether it is professional or personal, it is a factor in the prosperity, power, and greatness of the nation.

EXERCISES

1. What is meant by personal utility and how is it increased?
2. Can both parties to a trade gain?
3. In what sense can merchandising be called productive work?
4. Which do you consider more important, to save time or to save money? Why?
5. Under what conditions do public markets flourish?
6. Is storing goods a useful thing to do? Why?
7. How about monopolizing or cornering?
8. What is meant by standardizing goods?
9. In what cases is advertising useful work?
10. In what senses are artists, government officials, etc. productive workers?
11. Is all labor productive?

PART FOUR. EXCHANGE

CHAPTER XXI

VALUE: ITS MEANING

Exchange an important economic activity. Buying and selling, or exchanging commodities and services, is one of the chief activities in all civilized countries. The reasons for this are very simple. If you want a thing you have only three choices: you may find or produce it yourself, you may get it from someone else, or you may do without it. If someone else happens to have it you may find it easier to get it from him than to produce another thing like it. But if there is enough of a government to prevent you from using violence or fraud, your only chance of getting it from him is to make him willing to let you have it peacefully. One of the best ways of doing this is to offer him something which he would like to have in exchange for it.

Voluntary agreement among free men. Among all progressive peoples this method has been so largely followed as to make the exchange of goods and services one of the most important parts of the national economy. All progressive governments have been trying more and more to create conditions under which no person is permitted to use force or fraud against any other person. In proportion as this is accomplished men are led to get along together by voluntary agreement. The system of voluntary agreement as a means of getting things done has more and more displaced authority, force, or deception. Wherever the system of voluntary agreement among free citizens prevails, it is as certain as anything can be that there will be a great deal of exchanging. The reason for this is that it is more economical of time and energy to specialize, each one producing what he can produce most successfully and exchanging his products or his services with others.

There are thus seen to be two reasons for the general system of free exchange: first, the government must, by the suppression of

violence and fraud, have created the system of voluntary agreement as the basis of all organized action among free men; second, there must be a perception of the superior economy of specialization.

They who live in free countries, under liberal governments, are likely to take the system of voluntary agreement for granted, much as they take air, sunlight, the sky above, and the earth beneath for granted. Few realize that it took many thousands of years of painful progress to reach even our present stage. Not realizing what it has cost nor how precious it really is, thoughtless persons sometimes hold it in light esteem, as they do air and sunlight.

Exchange a part of the division of labor. The economic advantages of exchange will be clearly understood if we recall what was said in the chapter on the Division of Labor about the advantages of specialization. When the whole industrial society is so organized that each person can do that for which he is best fitted by nature, training, inclination, and location, the general quality of the work is better than it would be if everyone had to learn a great many things. It was also pointed out that the division of labor necessitates the exchange of products and services. Therefore exchange has come to be one of the most important departments of the subject of political economy. Our whole system of trading, transporting, and merchandising is a necessary part of an industrial system which is characterized by the division and specialization of labor.

Valuation a part of exchange. An important part of this intricate system of exchange is the process of valuation of goods and services. It would be difficult to do very much exchanging without beginning to think in terms of value. In fact, even in the simplest case of barter, as when boys swap marbles, each barterer compares in his mind the desirability of the objects that are to be exchanged.

To value is to esteem. To compare the desirability of the objects is to think in terms of value. In its original and individual sense the value of a thing was the esteem in which it was held; in a somewhat more highly developed, or social, sense the value of a thing is the esteem in which it is held by all those who are

interested in it. When men in considerable numbers are evaluating and comparing the same group of commodities, a market is said to exist. Where a market exists for an object, its value is the esteem shown for it on the market. The sign, or symptom, of that esteem is the fact that men are making sacrifices in order to get the object; that is, they are either laboring to get it or they are giving up other desirable things in exchange for it.

Value in exchange. This willingness to give something—either labor or another desirable object—in exchange for a thing has finally come to be regarded by most writers as the value of the thing, instead of being, as originally, regarded merely as the sign, or symptom, of the esteem in which it was held. A brief but satisfactory definition of market value, or of value as it is understood on the market and in commercial circles, is "power in exchange." Under this definition the value of an article is the power which it confers upon its owner to command other desirable things in peaceful and voluntary exchange. There has come, therefore, a change in the popular meaning of the word "value." In modern usage the esteem in which the object is held, or the desire which is felt for it, is that which *gives* it value instead of *being* the value itself.

Need of something to give in exchange. The purchasing power, or value in exchange, of an object is not always proportional to the esteem which is felt for it or the intensity of the desire for it. Among wanderers on a desert a small portion of water would be exceedingly precious; but if none of them had anything to give in exchange for it, it would not have much purchasing power. It would not have much market value; that is, its owner would not realize very much from its sale. It would, however, be held in the very highest esteem; it would be intensely desired; it would have great power over human motives; men would go to any length to get it; and if they had many things to give in exchange for it, it would have great power in exchange. The situation of some thirsty men on a desert with nothing to give in exchange for water is, however, very unusual. In the ordinary market place men have something to give for whatever they desire most. The thing which is intensely desired, esteemed,

or appreciated will, under such circumstances, always command many other desirable objects in peaceful and voluntary exchange.

Relation of utility to value. There is, therefore, a very close connection between utility and value. Utility is the power to satisfy a want or gratify a desire, but value is the power to command other desirable things in peaceful and voluntary exchange. Value depends upon utility, since nothing could have value unless it had the power to satisfy a desire of some kind. In other words, nobody would give anything in peaceful and voluntary exchange for the article in question unless he desired it. On the other hand, however intensely he might desire it, if he had nothing to give in exchange for it, and everyone else were in the same condition, it would not have much power in exchange. The water in the foregoing illustration would have great utility but no great value—certainly no great market value.

Censorious criticisms upon market value. There is, however, still another sense in which both *value* and *utility* are sometimes used. One who has strong ideas on the subject will sometimes assert that a given commodity is "really worth" very little, even though everybody seems to desire it and to be paying a high price for it, or that it is "really worth" a great deal, even though no one else seems to esteem it or to be willing to pay much for it. In this case the speaker is assuming the function of a moral or economic censor and is passing judgment upon the desires of other people. His judgment may be sound and that of the multitude unsound, or vice versa. There are, however, always those who have ideas on the subject of "real" value as opposed to market value and of real utility as opposed to the popular idea of utility. Their idea of "real" utility is the power to satisfy a commendable desire, whereas economic writers have generally, though not universally, defined utility as the power to satisfy any sort of desire.

Distinction between value and price. Value should also be distinguished from price. The price of an article, as has been explained many times is merely its value expressed in terms of money; that is, of some single commodity which the community

has generally agreed upon as the measure of value and the medium of exchange. Whenever the word "price" is used, if it is used properly, it means value expressed in money, or the amount of money which will be given in exchange for a certain article. Wherever the word "value" is used, at least in connection with the general conditions of the market, it means its general power in exchange against other articles, of which money is only one. The cheapening of money tends to create a general rise in prices but not a general rise in values.

To summarize, the economic value of an object is variously defined as

1. Its price; that is, the amount of money for which it sells. (This is a wrong use of the word "value.")
2. Its utility, which may mean
   a. Its power to satisfy any desire.
   b. Its power to satisfy a commendable desire. (This also is a wrong use of the word "value.")
3. Its power to affect the well-being of
   a. An individual.
   b. Society, or the nation. (This comes nearer to the point.)
4. Its power over human motives:
   a. Causing men to exert themselves in order to get it.
   b. Causing men to give other desirable things in exchange for it, because of
      (1) The intensity of their desire for it.
      (2) The abundance of other desirable things in their possession.

Since we are here concerned with the general problem of exchange and market value, the last of these four definitions will be used in this chapter. If we may accept "power in exchange" as a good working definition of market value, or value as it is used on the market and in our general system of exchange, several questions will at once arise. One of these is, Why do some things possess this power and others not? Another is, Why do some things possess more of it than others? Or, again, Why does the same thing possess more of it at one time or place than at another?

EXERCISES

1. Why do we do so much buying and selling?

2. What are the principal ways of getting a thing which you want?

3. How can you get a desirable thing from someone else without force or fraud?

4. In what proportion of the cases where you work in association with other people do you work under voluntary agreement and in what proportion do you work under authority?

5. What is the relation of exchange to the division of labor? Could there be much specialization without exchanging goods and services?

6. Could there be much exchanging without some estimation of the desirability of the things exchanged?

7. What is the simplest meaning of the value of a thing?

8. Does the esteem in which a thing is held always and everywhere determine its power in exchange? Give illustrations.

9. What is the relation of utility or usefulness to value?

10. Is everything "really worth" exactly what it will bring on the market?

11. How would you distinguish between value and price?

CHAPTER XXII

VALUE: ITS CAUSE AND QUANTITY

Value attaches to concrete things. Not much headway can be made in discussing the question of value until we distinguish between things in general and concrete units of things. Before speaking of the value of bread in general it is necessary to speak of the value of a loaf of bread. Before speaking of the value or the lack of value of air in general we must speak of the value or lack of value of a given cubic yard of air.

If one will look around and see what is going on, one will notice that men are not exchanging things in general, but only concrete units or quantities of things; not wheat in general, but a given number of bushels of wheat of a given grade; not money in general, but a given number of dollars, francs, or pounds. Even if air or water were exchanged, it would not be air or water in general, but some cubic yards or gallons in definite number.

This distinction between things in general and concrete units or quantities will eliminate forever the confusion that sometimes arises when that distinction is not made. For example, we are sometimes told that air is of immeasurable utility, yet it has no power in exchange. If one will think, however, not of air in general but of a definite cubic yard of air which may be boxed up (it might even be offered for sale), and then if one will ask one's self how much utility to him is possessed by that particular cubic yard of air, he will find that it is of no use to him whatever. If it were of any use to him—that is, if he would be any better off with it than without it—he would be willing to give something in exchange for it; it would then possess value, or power in exchange.

Total utility and final, or marginal, utility. This means, in other words, that there are two distinct ideas of utility: one is total utility, and the other is sometimes called specific, sometimes

final, and sometimes marginal, utility. We gain an impression of the total utility of air when we think what would happen to us if all the air in existence were suddenly annihilated or if we individually were shut off from access to air. From this point of view the total utility of air is incalculable. But if we were to consider what would happen if a definite cubic yard were annihilated or if we were shut off from access to it, we get a very different impression. As a matter of fact, it would make no difference to anybody, because there would be enough left to satisfy completely every desire for air.

The question of more or less. In this world of adjustment, improvement, and progress, or of maladjustment and retrogression, the problem of having more or of having less of various things is always the important problem. How desirable is it that there should be a cubic yard or a cubic mile more of air than there is, or how undesirable is it that there should be a cubic yard or a cubic mile less than there is? Apparently this would be a matter of indifference. It is for this reason that in a practical, workaday world, where we are trying to improve our condition or to prevent it from becoming worse, we place a value on only those things which we desire to see increased.

No social utility would be promoted by increasing the supply of air or by offering a price for increasing it. There is, therefore, no social or individual reason why it should possess any value or any power in exchange. On the other hand, if you think of an article of which you can say that you would be better off if you had a little more of it, or worse off if you had a little less than you have, you have a perfectly good individual reason for increasing your possession. Of if the community can say that it would be better off if it had more of it, or worse off if it had less, then the community would have a perfectly good reason for desiring to increase the supply. This is the case with everything that has value.

The moralist's valuation. A moral philosopher might conclude otherwise; that is, he might think that the desires of the people were vicious and that they would be worse off if they had more of a certain article, whereas they themselves think they would be better off if they had more of it. It is the desires of the

multitude rather than the conclusions of the moral philosopher which determine market value.

The function of value in a society is to induce producers to produce. It is a symptom that more of the article possessing value is wanted. It is, at the same time, a means of getting more; that is, if people will offer desirable things in exchange for an object, someone may be induced to produce it.

The first law of the market. The first law of the market is that things of the same kind and quality tend to have the same value at the same time and place. That is to say, at any given time and place, if there are many units, all exactly alike and equally desirable, they will all tend to sell at the same price or to have the same power in exchange. If they are unlike, some of them being more desirable than others, of course some will have more power in exchange than the others. Again, the values may, on a feverish market, change from minute to minute; that is, so rapidly as to create the illusion of selling at different prices at the same time. Or, again, in different portions of the same market similar things sometimes sell at different prices. The tendency, however, is toward a uniform price at the same time and place.

Where a commodity has become standardized so that there are many units that are equally desirable, it has become customary to buy the article by quantity without taking the trouble to pick out the specific units desired. Wheat, coal, cotton, pig iron, and many other commodities are so graded and standardized as to sell in this way. On the other hand, there are a great many commodities that are not easily standardized. In these cases the purchaser will usually insist on picking out the individual units which he desires. Race horses, dwelling houses, farms, building lots, and a multitude of other things will probably always have to be bought and sold in this way.

A thing has value only when someone wants it. A concrete article of the kind just described or a definite quantity of a standardized article will have power in exchange, of course, only on condition that somebody happens to desire it. No one will give any desirable thing in peaceful and voluntary exchange for

something which he does not desire to possess. Again, the quantity of value which a thing will possess—that is, the number of other things which will be given in exchange for it—will depend on how much it is desired in comparison with those other things. If the article in question is very much wanted and a number of other things are not much wanted, then a considerable quantity of these other things will be given in exchange for it.

Two reasons why a thing may not be wanted. The next question is, Why are some things desired and others not? And why are some desired more than others? There are two primary reasons why an article may not be desired at all. In the first place, it may possess no total utility; that is, there may be no use to which it can be put, so far as anyone knows. There are not, however, very many such things. The other reason is that there are so many other things just like the one in question as to more than satisfy the desire. Where water is very scarce the desire for it becomes intense; where it is abundant the desire is completely satiated, so that if a specific barrel or gallon of water were offered for sale no one would desire it at all. In such a situation water would have as little value as though there were no possible use to which it could be put.

One might go even farther and name articles which, though capable of satisfying desires or of being put to important uses, have yet become worse than worthless; that is, have become nuisances through their overabundance. Many of the weeds which infest our fields belong in this class. Water in a swampy region also comes to possess a negative value,—that is, men will go to considerable expense to get rid of a part of it,—and yet it may be perfectly good water, capable of contributing not only to human life but to plant and animal life as well. Rabbits in Australia and English sparrows in America will serve as further illustrations.

A commodity has value only when there is not enough of it. We therefore reach the general conclusion that an article (that is, a definite object, such as may be bought and sold) has value only when it is wanted, and that it is wanted only when there are so few objects like it as to leave the desire for it partially unsatisfied.

Following the same line of reasoning, we may reach the further conclusion that an object has much value when it is much desired and little value when it is not much desired. Its power in exchange as compared with other things will depend on how intensely it is desired in comparison with other things.

Physiological basis of the law of demand and supply. The great law of supply and demand is thus seen to have a physiological and psychological basis. The expression "supply and demand" is merely a formula; back of this formula there is the physiological fact pointed out in Chapter II. Every desire is satiable, and the more nearly the desire approaches the state of complete satiation, the less intense it becomes. Thus the reason that any superabundant article under ordinary circumstances has no value is because it is so abundant that every desire is completely satiated. With a given demand, the greater the supply the more nearly all desires will approach the point of satiation, and the more indifferent everyone's attitude toward the object becomes; on the other hand, the smaller the supply the more intense the desire for each unit of that supply, and the more anxious men are to get it.

Meaning of scarcity. When we say that an article has value only when the desire for it is left unsatisfied, we are virtually saying that it has value only when it is scarce. Scarcity is, by definition, insufficiency to satisfy desires. A thing may be rare without being scarce—that is to say, however little there may be of a certain article, if that little is more than sufficient to satisfy all desires the article can hardly be said to be scarce; or however much there may be of a thing, speaking absolutely, if there is not enough to satisfy all desires it is said to be scarce. Flies in the winter time may be rare, but they are not scarce in the technical economic sense, since even then there are more than are wanted. If we assume that the article in question is appropriable, or capable of being possessed and enjoyed, and not, like the moon, entirely beyond our reach, we may say that anything which is both desirable and scarce will have power in exchange and that nothing else whatever will have that power.

Social value. We now approach a secondary phase of the law of value. Even though a man's desire for apples may be completely satiated, not only in the present but in the anticipated future, his commercial instinct may prompt him to prize them. He will prize them not because he himself desires to consume them but because he can trade them to someone else for objects which he himself desires. At this stage he has arrived at the point where he begins to take account of social utility as well as of individual utility. If he perceives that there is in society around him an unsatisfied desire for apples, he may make use of that unsatisfied desire to acquire desirable things in exchange for his own surplus apples. He is able to use to his own advantage this power in exchange which commodities possess on the market. Thus we see a great many men producing articles far in excess of their own needs because they know that these articles are exchangeable for other things which they need. We see a considerable body of men doing nothing except to trade in objects of general social desire. But the laws which govern social valuation are fundamentally the same as those which govern individual valuation. There must be somebody in the community who has less of the object than he wants; otherwise neither the producer nor the trader would be able to exchange the object for other desirable things.

Diminishing utility. Desire and utility are reverse aspects of the same thing. The desire exists in the human being and is that which the object of the desire is capable of satisfying. Utility exists in the object and is that which is capable of satisfying the desire of a human being. Since every desire is capable of being satiated, the more nearly it comes to being satiated the less intense the desire becomes. That is why the desirability of a thing diminishes as its quantity increases. This again is the physiological basis of the law of supply and demand.

Summary. To summarize, we find (1) that only concrete units of desirable things are bought and sold; (2) that such units have value only when there are not enough to go around and satisfy everybody; (3) that each human desire is capable of being completely satisfied or satiated; (4) that when and where a thing

is so abundant as to satiate every desire for it, it has no value; (5) that when it is so abundant as nearly to satiate every desire for it, each unit will have little value, because it will not be intensely desired; (6) that when a thing is so scarce as to leave many desires far from satiation, each unit will have much value, because it will be intensely desired.

EXERCISES

1. Do men buy and sell things in general or concrete units of things? Illustrate.

2. What is the difference between total utility and marginal utility? Illustrate.

3. If someone were to box up a cubic yard of air and offer to sell it to you, himself requiring the return of the box, would you buy it? Why not?

4. If someone were to offer to sell you a gallon of water when you were standing by a lake, would you buy it? Why not? Would you buy it if you were in a desert? Why?

5. Would the community where you live be better off if it had more water? Does water command a price in your community? Is your country a dry or a wet country?

6. What is the first law of the market?

7. Would a thing have value unless someone wanted more of it than he had already?

8. What is meant by scarcity? Is it the same as rarity?

9. What is meant by the satiability of a desire?

CHAPTER XXIII

SCARCITY

Causes of scarcity. It was shown in the last chapter that a thing must be both desirable and scarce in order to possess value. We have now to inquire why such things are scarce. There are four reasons which come within the limits of our comprehension. These we may call (1) "the niggardliness of nature," (2) the expansion of desires, (3) the cost of production, and (4) monopoly.

"Niggardliness of nature." When the term "niggardliness of nature" is used, it is not intended to cast reflections upon nature nor to imply that she is not bounteous in many respects. It is merely to call attention to a fact which cannot well be disputed; namely, that in many places men have congregated in numbers greater than nature has provided for. Desirable things are scarce in those places, and it is at least necessary to bring supplies from other places, where there is a surplus. Moreover, there are many things that we desire which nature does not supply at all in the form in which we desire them, though she supplies the raw materials out of which we may make them. Again, some things which we desire can be produced only at certain times and seasons. They must therefore be preserved and kept for other times when they will be needed.

Expansion of desires. The fact that nature does not supply us with everything we desire in the exact forms and at the exact times and places when and where we happen to desire them may be due, first, to the fact that we desire more refined products than grow in a natural state; or, second, to the fact that great numbers of us choose to live in places where such products do not grow in sufficient abundance. Therefore we must expect an indefinite continuation of the condition wherein some desirable things are insufficient to satisfy everybody. We shall therefore continue trying

to increase the supply of desirable things in the forms in which they are wanted and at the times when and the places where they are wanted. This is called the production of utilities or, more properly, the adding of utilities to material things,—form utility, place utility, and time utility.

Cost. If the efforts which we have to make in order to get useful things were altogether pleasant and not in the least degree unpleasant or disagreeable, there is no reason why most things might not be produced in such abundance as to satisfy everybody completely. Some things, of course, cannot be increased by any human effort. Meteoric iron has long served as an illustration. Autographs of distinguished men of the past, the paintings of old masters, first editions of books, and a number of other illustrations might be given. But if we are speaking of an ordinary reproducible commodity, we are safe in saying that unless there were some difficulty in the way of indefinite reproduction,—some unpleasantness, irksomeness, or fatigue connected with its production,—its supply would certainly increase until everyone had all he wanted of it.

Effort not always irksome. Illustrations are not hard to find of desirable commodities which have to be secured by human effort, but which, because the effort is pleasant rather than unpleasant, become so abundant as to command no price. Trout are generally regarded as a delicacy and are greatly desired. They can be caught only by considerable muscular effort and by the exercise of great patience and skill. And yet, in certain communities where the demand is not very great and the fishing not too arduous, trout are caught for sport in such numbers as to supply the neighborhood. They become free goods and are given to those who desire them without money and without price. If there were more consumers, or fewer persons who enjoyed the sport of fishing, there would not be enough to go around. Those who did not get as many as they desired would then be willing to pay a price in order to get more. The price would be paid, virtually, to overcome the disinclination of producers; that is, the disinclination of unenthusiastic fishermen.

Disinclination. All the reproducible things which sell on the market and which are not monopolized are limited in supply by some form of disinclination or reluctance to carry on the work of production. This disinclination may resemble that which one finds in the average fisherman, to whom the work in small doses is not irksome, or it may be of a different sort altogether. In the case of the fisherman, his work may be pleasant rather than unpleasant up to a certain point. Almost anyone likes a certain amount of this kind of work, though some of us are easily satisfied. Beyond that point such work becomes irksome and fatiguing, and we keep at it only on condition that someone pays us for it. Up to that point it was play; beyond that point it literally becomes work.

Opportunity cost. Where two kinds of work are pleasurable and a person has to choose between them, the fact that he has to surrender the one form of pleasure in order to pursue the other introduces an element of cost or sacrifice. It is reported of a certain man that he was passionately fond of gardening, but could never stick to it, because as soon as he began to dig he found worms, and they reminded him of fishing, of which he was even fonder than of gardening, which then became irksome.

In other cases the work is disagreeable from the very start. There is no element of play in it. No one will do any of it unless he is paid for it. In still other cases the work itself would be pleasurable rather than disagreeable up to a certain point, if it were not for the fact that there is something else that one would rather be doing. A boy might not ordinarily mind working in the garden, but when there is a circus in town or a ball game going on, gardening suffers in his estimation by comparison with these other opportunities. Whenever we have to work long hours there are pretty certain to be many other and more pleasurable things which we would rather do. Having to give up these other opportunities would make our work irksome even if it were not so of itself.

The resistance which has to be overcome in order to get men to work. Cost, or cost of production, is the general name which we apply to the resistance which has to be overcome in order to get a thing produced. The real resistance is the resistance of the

human will, as shown by the fact that even though physical effort has to be put forth, so long as the effort is pleasurable it does not have to be paid for. As soon as it becomes irksome it has to be paid for. It is a matter of choice, and the price paid is a means of influencing choice. The irksomeness of the effort causes men to choose against putting forth the effort; the price paid for the article causes them to choose in favor of it.

Distinction between play and work. The difference between play and work is found just here. Play is effort of both mind and body which is put forth for the sheer pleasure of the effort itself. Work is effort which is put forth for the sake of some other reward. Under very favorable circumstances all necessary effort might conceivably take the form of play, and in that case there would be no such thing as cost of production. A community made up of people with very simple habits and very strenuous natures, and in a very favorable environment, might possibly reach such a delectable state. Having very simple habits, the inhabitants of this community would be able to get the greater part of their higher satisfactions out of those things whereof nature is bounteous, such as the sky, the clouds, the verdure, and pleasant company. Living in a very favorable environment, they could produce such things as had to be produced with little effort. Having very strenuous natures, abounding in energy and delighting in effort, they could do the necessary work of production without any disinclination or reluctance. This, however, would be a kind of earthly paradise which we may dream about but are not likely to realize.

Kinds of cost. When we say that the price of an article has to be high enough to cover the cost of production, we really mean that it has to be high enough to overcome the disinclination of men to do whatever is necessary in order to produce it. This disinclination, or cost, is of various kinds and degrees. Mention has been made of those operations which are inherently disagreeable from the very start. This may be called disutility, or pain cost. In other cases there is no disinclination until the work has been carried so far as to produce a sense of fatigue. This may be called

fatigue cost. Again, the disinclination may be due to the fact that the work in question prevents us from doing something else which we would rather be doing. This is called opportunity cost. The opportunity which one gives up may be of two kinds: the thing which one gives up may be pleasurable in itself (that is, it may be play or amusement) or it may consist in the opportunity to earn money at some other job. In either case one must be paid for doing the thing in question, even though it is neither painful nor fatiguing, otherwise one will avail one's self of another opportunity.

Diminishing importance of pain cost. Of these three forms of cost, pain cost is, in our day, the least important. In a rude state of society, when conditions were hard and enemies numerous, it may have been different. Nowadays, outside of a few dirty, dangerous, or otherwise disagreeable occupations, there is comparatively little work which is disagreeable in itself. When hours are long, much of it is likely to be fatiguing and irksome for that reason.

As prosperity and well-being increase, and general social conditions improve, opportunity cost comes to play a more and more important part. Even the possession of high wages or a large income creates opportunities for amusement or pleasure which otherwise would not exist. One then finds long hours more irksome than they would otherwise be, not because they are more fatiguing, but because they deprive one of those opportunities for pleasure which one's larger income enables one to enjoy. A well-educated man has more opportunities for the pleasurable exercise of his faculties than an uneducated man; therefore he needs more time in which to do these pleasurable things. If his services are desired, he must generally be paid more in order to induce him to give up these other opportunities. Far more important than that, however, is the fact that a well-trained man has many more opportunities to earn money than an untrained man. Among these opportunities he will choose only the one which he likes best. Whoever desires his services or his products must therefore bid against all other opportunities which lie before the trained man.

Increasing cost. As population increases or concentrates in certain areas, the natural resources of those areas must either be worked more intensively or else the means of subsistence as well as the raw materials of industry must be brought from greater distances. To bring them from greater distances obviously requires greater effort, unless new and improved methods of transportation are invented. Even with the best methods attainable it costs more to haul longer than shorter distances. To work mines harder tends to exhaust them more rapidly. It is also possible to work land so intensively as to exhaust the soil unless greater care is taken to put back in the soil as much plant food as is used up by the crops which are taken off. To exhaust either the mines or the soil will obviously make greater and greater efforts necessary if a large population is to be provided for on the same scale as before the exhaustion took place. Poorer mines must be worked, and crops must be grown on poorer soil where more effort is required to get the same crop.

Diminishing returns and increasing cost. Entirely apart from the exhaustion of the soil, however, is the great law of diminishing returns from land. This law, which is one phase of the universal law of variable proportions, will be discussed in detail in a chapter devoted to that subject (see Chapter XXIX). For our present purpose it is necessary only to state and define the law.

It is a well-known fact that land yields more per acre under intensive than under extensive cultivation. By intensive cultivation is meant the application of considerable quantities of labor and capital to each unit of land; by extensive cultivation is meant the application of smaller quantities of labor and capital. While land can be made to yield more when large than when small quantities of labor and capital are used in its cultivation, still there are limits to this rule. In the cultivation of any particular crop there comes a point beyond which it does not seem possible, by any amount of labor, care, or cultivation, to increase the yield appreciably. Long before this point is reached, however, there is a tendency for the land to yield less in proportion to the labor and capital employed, even though it continues to yield slightly

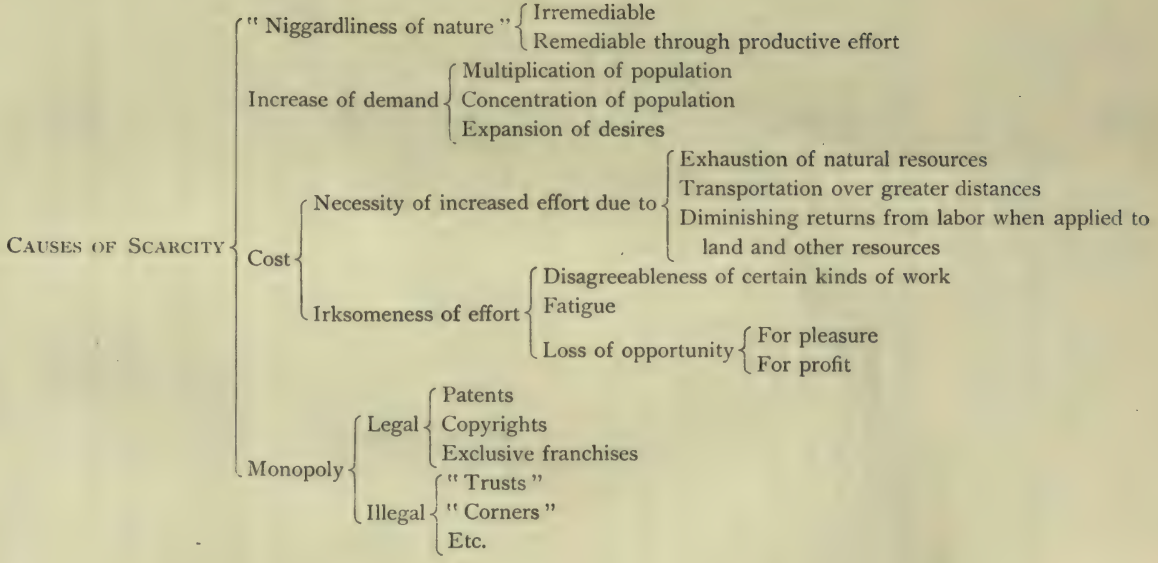
more in proportion to the acres cultivated with each increased application of labor and capital to its cultivation.

Rather than incur the increasing cost of production which would be necessary if an increasing population should attempt to get its subsistence from the same soil, men have uniformly chosen to spread their cultivation over wider areas, thereby incurring increased cost in transportation, or they have resorted to inferior soils within the boundaries of the original area, or they have done both. There is no good reason in the world why they should ever have done either of these things except that which is furnished by the law of diminishing returns.

We have, therefore, several reasons why increasing effort is necessary to get increasing supplies for an increasing population. The law of diminishing returns is one; the tendency toward the exhaustion of the soil, mines, and other natural resources is another; the necessity of cultivating inferior soils is another; and that of transporting materials greater distances is still another. All of these, however, are closely joined together, and they mutually determine one another. Add to these the fact that increasing effort becomes increasingly irksome both because of increasing fatigue and of increasing opportunity cost, and we have what may be known as the law of increasing cost. This law of increasing cost, in turn, is the chief factor in limiting production and keeping the supply of various commodities so scarce as to give them a value.

Monopoly. Among the factors which tend to make commodities scarce nowadays, one of the most important is monopoly. A monopoly is an agency which has sufficient control over the supply of a given commodity to fix its price. Without this control over the supply, neither principalities nor powers nor trusts can control prices. Without this control over supply, any attempt to fix prices above that level which would pay the cost of production would merely tempt other producers to enter the field and take the market away from the would-be monopoly.

Aside from the government, probably no such thing as an absolute monopoly exists. A partial monopoly exists whenever an organization exercises sufficient control over the supply of


CAUSES OF SCARCITY
" Niggardliness of nature "
Irremediable
Remediable through productive effort
Increase of demand
Multiplication of population
Concentration of population
Expansion of desires
Cost
Necessity of increased effort due to
Exhaustion of natural resources
Transportation over greater distances
Diminishing returns from labor when applied to land and other resources
Irksomeness of effort
Disagreeableness of certain kinds of work
Fatigue
Loss of opportunity
For pleasure
For profit
Monopoly
Legal
Patents
Copyrights
Exclusive franchises
Illegal
" Trusts "
" Corners "
Etc.

anything to enable it to fix its price, even within a narrow zone, independently of competition. This means that the power of a partial monopoly over prices is not absolute. It may fix the price somewhat higher, but not much higher, than competition would fix it. Where a monopoly is not absolute, if it attempts to fix prices outside these limits it will create competition and destroy its power to control.

This control may be exercised in two ways: first, the monopoly may decide upon the quantity to be produced and then sell that quantity for whatever it will bring on the market, allowing the law of demand and supply to fix the price; second, the monopoly may decide upon the price at which it will sell the product and then produce only as much as can be sold at that price. This is the method usually followed.

In a genuinely competitive industry the supply is limited by the cost of production. Producers will stop production rather than sell for any considerable time below the cost of production.

EXERCISES

1. What are the leading causes of scarcity?

2. What is meant by the "niggardliness of nature"?

3. What is meant by the expansion of desires?

4. Suppose that a thing could be produced indefinitely without cost, would it have any value?

5. What is cost and what are its principal forms?

6. Does it cost you anything to play baseball? If so, in what sense? Are you disinclined to play? Do you have to be paid to play?

7. What is the real difference between work and play?

8. Are you disinclined to go fishing? Do you have to be paid for it? Suppose that it interfered with something else that you would rather do.

9. What is meant by opportunity cost?

10. Is opportunity cost growing more or is it growing less important?

11. What is the relation of diminishing returns from land to the cost of growing crops?

12. How does a monopoly control prices?

CHAPTER XXIV

MONEY

Money a labor-saving invention. If there is economy in specializing in production and exchanging products, there must be further economy in any means or device which enables us to make our exchanges with less trouble. Money is such a device. It is, in fact, one of the greatest of all labor-saving devices. If one will try to imagine the difficulties of carrying on exchange without the use of money,—that is, by means of direct barter,—one will easily understand how great a convenience money is. Of course, without the use of some kind of money we never could have developed our present highly specialized industrial system.

Even if we could imagine an industrial system based on barter, the difficulties would seem almost insuperable. The tailor who had made a coat and desired bread in exchange might find difficulty in finding a baker who happened to want a coat. The dairyman who had milk to sell would find it difficult to know how to collect payment for the very small quantities which he delivered to the butcher, the baker, the tailor, etc. These difficulties would be so great that, in all probability, there would be comparatively little exchanging. The farmer would have to be his own butcher, tailor, and shoemaker. Each household, in fact, would have to be almost self-sufficing.

Various substances which have served as money. Various commodities or articles have served the purpose of money. The early colonists in America found the Indians using a kind of currency known as wampum, or bead currency. The Hudson Bay Company and other companies that traded with the Indians of the interior developed a skin or fur currency, in which the skins of various animals were recognized as standards of value and exchanged at the ratios agreed upon. In ancient times various

European peoples used cattle as currency. In the Homeric poems values are frequently quoted in terms of oxen.

So great is the need for money in a society where there is any exchanging of desirable articles that almost anything which is commonly used and appreciated may serve the purpose of money. Among primitive herdsmen, therefore, cattle met the conditions. They were universally esteemed and appreciated, they were familiar objects whose value was generally understood, and they were easily transferable. They lacked, however, certain other qualities which make modern metallic money convenient.

Qualities which the money material should possess. Jevons, in his "Money and the Mechanism of Exchange," names seven qualities which are desirable in the material of which money is made. They are, first, utility and value; second, portability; third, indestructibility; fourth, homogeneity; fifth, divisibility; sixth, stability; and seventh, cognizability. Cattle possess only the first, second, and seventh of these qualities and, perhaps, to a slight degree the sixth. That they are useful to primitive herdsmen is rather obvious. They furnish their own portability in that they can carry themselves about. They possess cognizability because all are familiar with them. There may be a certain stability also in their value, though that is by no means certain. The skins of animals, used as money by hunting tribes, possess the same qualities as cattle, but still lack the others which Jevons deems desirable.

Precious metals especially adapted. It has been found that the precious metals, especially gold and silver, possess all these qualities in superior degree. If by utility we mean desirability, or the capacity to satisfy a desire, there is no doubt that gold and silver possess this quality. They possess portability because there is considerable value in small bulk. This would not be true of the coarser metals. They possess indestructibility in a high degree; they do not corrode or rust as iron would. They possess homogeneity — that is, gold of equal purity is essentially alike the world over; it may be easily standardized as to quality, so that one piece of metal may be exactly as desirable as every other piece

of the same size and standard of fineness. They possess divisibility—that is, a piece of gold or silver may be divided into smaller pieces, and each of the smaller pieces will have a value in exact proportion to its size. Each may be melted down and recombined into larger pieces, and each piece will still have value in proportion to its size. This would not be true of diamonds and precious stones, though these would possess portability and indestructibility in high degree.

COINS OF SYRACUSE

Gold and silver possess stability of value in a very peculiar sense. Over long periods of time they will fluctuate considerably, but over short periods of time—that is, from week to week, from day to day, from hour to hour—they will fluctuate very little; whereas other commodities, such as farm products, pig iron, and other articles which are largely dealt in, fluctuate rapidly over short periods of time.

Reasons for the stability of gold prices. One reason for the stability of the value of the precious metals during short periods is that the mass of gold or silver in existence at any one time is very large in proportion to the product of any given year. The total amount of wheat in existence at the present moment has practically all been produced within the last year, or two years at the outside. Of the total gold in existence a very small fraction was produced within the last year or two.

Since most of the transactions in which we use money are short-time rather than long-time transactions, it is more important that the money material be stable in value over short periods than over

long periods. This is one of the principal reasons why gold and silver serve the purpose of a money material better than most other products.

As to cognizability, the superiority of gold and silver over other materials is not so great. The expert can always apply tests by means of which he can detect spurious coins, but the inexpert usually has to depend upon his eyes and his ears and his sense of touch. But there are not many other substances which cannot be adulterated or of which counterfeits may not be made. Gold and silver are not particularly wanting in cognizability, though they are not preëminently superior in this respect.

For certain minor coins, however, neither gold nor silver is well adapted. There is so much value in such small bulk in gold, for example, that one would need a magnifying glass and tools more delicate than the human fingers to handle gold coins of the value of our five-cent pieces and one-cent pieces. Mere physical convenience requires a coarser metal for these small values.

The following forms of money are in use in the United States.

KINDS OF MONEY IN THE UNITED STATES

- Coin
  - Gold
    - Double eagle
    - Eagle
    - Half eagle
    - Quarter eagle
  - Silver
    - Dollar
    - Half dollar
    - Quarter
    - Dime
  - Nickel (five-cent piece)
  - Bronze (one-cent piece)
- Paper
  - Gold certificates
  - Silver certificates
  - Treasury notes
  - United States notes (greenbacks)
  - National bank notes
  - Federal Reserve notes
  - Federal Reserve bank notes

The coins are so familiar as to require no description. Their differences appeal readily to the eye. It is noticeable, however, that comparatively few people note carefully the different kinds of paper currency. The first three forms of paper currency mentioned in the above outline may be called warehouse receipts. For the convenience of the people the Federal Treasury issues these receipts in return for deposits of other forms of money. If, for example, one has a large quantity of gold or silver coin and desires something more convenient, he may deposit the coin with the Secretary of the Treasury and receive in return gold or silver certificates. These merely certify that the coin has been deposited in the Treasury. These certificates then circulate as money.

The United States note, popularly known as the greenback, is issued by the Federal government as pure credit currency. The issue of these notes was authorized by act of Congress during the Civil War as a means of financing the war; that is, as a means of paying the obligations of the government. The amount then authorized, with only a slight reduction, has been kept in circulation ever since. The national bank notes are technically known as national currency. They are secured by United States bonds or other securities deposited with the Secretary of the Treasury. They are issued to the bank making the deposit and bear on their face the name of the bank. It is the bank, however, which agrees to pay, rather than the government; the government merely stands behind the bank.

The Federal Reserve notes are issued to the Federal Reserve banks by an agent of the United States Treasury. They are sent to the member banks by the Federal Reserve banks in return for deposits of commercial paper and are then put into circulation by the local, or member, banks. The Federal Reserve bank notes are issued to the Federal Reserve banks by the United States Treasury in return for deposits of government bonds, being in all essentials like the national bank notes, which they are intended to replace.

Standard money. Among all these forms of money there is one which is known as standard money—that is, gold coin. The

value of the gold coin depends on the value of the material of which it is made. So long as the present policy of the government is maintained, the value of a gold coin will aways be the same as that of the metal which it contains. One reason for this is that the government will undertake to coin all the gold that is brought to the mint and to charge nothing for the work of coining except the value of the alloy which is put in. Since this alloy also has some value, this virtually means that if you bring to the mint not only the gold but also the other materials which go into the coin, in the proper ratio, the government simply does the work of coining free of charge; you merely supply the raw material. When, therefore, there is even the slightest tendency for the value of coin to rise above that of bullion, men will anticipate this tendency by taking bullion to the mint. Since coin is easily melted down into bullion, if bullion showed the slightest tendency to exceed coin in value, that would be anticipated by melting coin down into bullion. These two processes make it practically certain that so long as the government can maintain its policy gold coin and bullion will be identical in value.

Why not cheap money? The question has frequently been raised, Why use such expensive materials as gold and silver for money? Would not some cheap substance, such as paper or aluminum, serve equally well? Many long and heated controversies have been waged over this question. The so-called "hard-money" school have taken the position that the government cannot make money; it can only stamp money. The stamp merely serves as a certificate of its weight and fineness; the market itself must then determine its value. The "soft-money" school, on the contrary, have pointed to many historic instances in which cheap materials have actually served as money and circulated at a value which bore no relation to the value of the substance of which it was made. The truth seems to be summarized as follows:

1. Long-established customs in a country—such, for example, as China, where custom rules supreme—may enable a kind of money to circulate at a customary value regardless of the commercial value of the material of which it is made.

2. A government which is in the habit of using a great deal of compulsion over a people who are in the habit of submitting to authority and compulsion may by its own decree cause money to circulate at legally established rates without regard to the commercial value of the substance of which it is made. But a government which is not in the habit of exercising a great deal of compulsion, and a people who are not in the habit of submitting to it, have to rely mainly upon voluntary agreement among individuals in most of the relations of life.

3. Where voluntary agreement rather than government compulsion is mainly depended upon, it has hitherto proved impossible to get people voluntarily to agree upon any substance as the material for standard money except something which had a value as raw material commensurate with its value as money.

4. Cheaper substances may, however, be used in limited quantities as token money even in liberal countries where everything is done by voluntary agreement, under three sets of conditions: (1) when the government will give standard money in exchange for it—that is, redeem it in gold; (2) when the government will accept it in payment of taxes and other dues to itself; (3) in small quantities when the government exercises its authority by compelling a creditor to accept it in payment of a debt when offered by a debtor.

Legal tender. The last is what is known as a legal-tender law. While it is an exercise of compulsion, it is one to which even liberal governments resort. It seems necessary in order to preserve the system of voluntary agreement among free citizens.

EXERCISES

1. In what sense is money a labor-saving device?

2. Illustrate some of the inconveniences of barter.

3. Name some of the things which have been used as money.

4. What qualities are desirable in the material of which money is made?

5. Why are gold and silver especially fitted to serve as the money material?

6. In what sense is the value of gold stable and in what sense is it not?

7. Why does the value of gold change so little during short periods of time?

8. Why is gold unsuitable for the making of five-cent pieces?

9. Name the principal kinds of coins in use in the United States.

10. Name the principal kinds of paper money in use in the United States. Describe each kind.

11. What is meant by standard money?

12. Under what conditions can cheaper substances than gold or silver be used for money?

13. What is legal tender?

14. Which would be better, to bear the cost of the precious metals as the money material, or to encourage the government to exercise the authority, and the people the obedience, necessary to make cheaper substances circulate as standard money?

CHAPTER XXV

BANKING

Promises to pay. Where business is done on the basis of voluntary agreement among free citizens it is probable that many kinds of agreement will be made. Among these many forms there will probably be promises to pay money or to deliver some desirable object at some future time. In order that such promises may be accepted, one or both of two conditions must exist. First, and most important, the receiver of a promise may have confidence in the maker of the promise, both as to his honesty and his ability to fulfill his promise. Second, the receiver of the promise may have confidence in the power and the willingness of the government to compel the maker of the promise to keep it. Unless one or both of these forms of confidence should exist, promises to pay are not likely to have much value or to be accepted widely.

Need of institutions to deal in promises to pay. In all countries where confidence exists—that is, where men are generally honest and governments reasonably efficient—these promises come to play a large part in free and voluntary exchange. The mass of such promises, and the habit of dealing in them, has come to be called the system of credit. The most common of these promises are promises to pay money. So common have they become, and there is so large a volume of them, that they call for special institutions or business establishments to deal in them. These establishments are now called banks.

The business of a bank: receiving deposits. The original business of a bank was ostensibly to deal in money, but it has developed into a business of dealing in credit or promises to pay money. The way in which an ordinary commercial bank does this is very interesting and very simple. After the bank is once organized and ready to do its real work, the first thing is to receive

a deposit of money; that is, some person leaves money in the bank, perhaps for safekeeping, and receives a certificate of deposit. This certificate is an acknowledgment that the person has deposited the money and a virtual or implied promise to pay it back whenever the person wants it. The customer now has, not money, but the promise of the bank to pay money whenever he wants it.

Making loans. The next thing the bank does is to make a loan to someone who wants money, receiving in return his promise to pay it back on a certain date. This may be a part of the money which the above-mentioned customer has deposited.

When a bank has many depositors to whom it owes money, and many borrowers who owe it money, it is, *if properly managed*, a safe business for all concerned. The depositors to whom the bank owes money are not likely to want it all at once. All the bank has to do is to see that it has in its vaults every day a little more money than its depositors are at all likely to want on that day. When the bank is properly managed, its promises to its depositors are always good, and the depositors can always get their money when they want it. At the same time all the promises to pay which it has received from borrowers are always good, and the borrowers will pay back the money the day it is due.

In order to understand how a depositor is safeguarded, it is necessary to go a little more into detail. In the case of a state bank, all the property of the bank is ultimately available for the payment of the depositors; that is, if the affairs of the bank are wound up, every depositor must be paid in full before the owners or shareholders get anything out of it. In the case of a national bank, the bank notes which it has issued take precedence, but these are secured by special forms of property (such as government bonds and other securities) which it has deposited with the Federal Reserve Board. All the other property of the bank is then available, as in the case of the state banks, for the payment of the depositors. In addition to this, each shareholder may be assessed an amount equal to the par value of his shares in order to pay depositors. Thus the shareholders, or owners, may lose all that they originally put into

the business plus an equal amount, before any depositor can lose anything. This makes the depositor relatively safe.

Reserves. Let us now see in what the property of the bank consists. In the first place, there is what is called the reserve. This consists either in cash on hand or in part cash on hand and part deposits in the Federal Reserve Bank. This reserve is required to bear a certain ratio to the total cash obligations of the bank, and in normal times is always ample. It is obvious, however, that if an abnormally large number of depositors were to demand payment at the same time this reserve would be exhausted; that is to say, the bank would have no cash left. Unless the bank could get extra supplies of cash, depositors would then have to wait until some of the other property of the bank could be turned into cash.

This other property, however, is mainly in the form of loans of various kinds, and would be ample unless there had been fraud or bad management. Since most of these are short-time loans, they are being paid from day to day, and cash is rapidly flowing in. Normally this would replenish the cash reserve in a few days. In fact, the bank can usually call loans in rapidly enough to keep its cash from being exhausted even by an abnormal demand. In addition to these short-time loans, there are usually a few long-time loans and other securities. If these are exhausted and the affairs of the bank have to be wound up, the real estate and office fixtures may be sold. If these are not enough, the owners of the bank may be assessed, as indicated above, in order further to safeguard the depositors. In short, nothing except fraud or bad management could cause a depositor to lose any portion of his deposit.

Making money more active. By looking carefully after these matters and by receiving many deposits and making many loans, the bank performs some very useful services for the community and the nation. One of these services is to take money which would otherwise have remained inactive and put it to work. The individual who has a fund of money which he does not care to use right away may deposit it with a banker; someone else who

needs money right away may go to the banker and borrow it. The banker is therefore the middleman who brings together the one who has money to spare for which he has no immediate need and the one who has a productive use for money which he does not possess. Without the banker these two men might have difficulty in finding each other. The banker at least saves them time and trouble.

Kinds of deposits. The methods by which a bank deals in promises to pay are by receiving deposits and making loans. These are the essential functions of all banks, but there are different kinds of deposits and different kinds of loans. The principal classes of deposits are time deposits and deposits subject to check. The depositor may prefer to leave his money on deposit for a long or a stated time, or he may prefer to deposit it on condition that he may withdraw it any day when it suits his convenience to do so. The former class of deposits are commonly called savings deposits, and the latter, deposits subject to check. The savings banks are a special class which receive savings deposits, whereas the ordinary commercial banks receive deposits subject to check, though many commercial banks have savings departments, thus meeting the needs of both classes of depositors.

Loans. The commercial bank whose depositors desire the privilege of withdrawing their deposits at any time, without previous notice, must necessarily follow a somewhat different policy with respect to its loans from that which savings banks may follow. The loans of the commercial bank are mainly short-time loans, seldom more than ninety days, while the savings banks may lend for longer time or invest largely in mortgages or other long-time securities.

National and state banks. National banks in this country are commercial banks that operate under national law. State banks operate under state law. Their functions are the same except that national banks are permitted to issue bank notes while state banks are not.

Trust companies. Trust companies were originally formed, as their name implies, to act as trustees; that is, they would

take care of valuable papers, such as mortgages and other securities, collect interest on them, pay obligations when due, execute wills and bequests, handle estates for people who needed or desired to be relieved of the work, and perform a great many other similar tasks. In the course of this work they naturally had to handle a great deal of money. At one time they kept this money in regular banks, but in recent times they have generally kept it in their own vaults or have loaned a part of it on ordinary commercial loans. This means that they have been doing a regular banking business in addition to the business of a trust company as originally conceived. In fact, it is not, at the present moment, easy to distinguish a trust company from any other commercial bank.

Origin of the bank check. Originally, when a depositor who had money in a bank wished to make a payment to another person, it was necessary for the depositor to withdraw his money from deposit and hand it to the other person. A little later the custom grew of going in person to the bank and authorizing the bank to transfer a certain sum from the payer's to the payee's account. The payee could then draw out the money as he needed it. From this it was an easy step to the custom of giving the bank a written order to pay a certain sum to another person. This written order became known as a bank check. These checks proved so convenient that they have become one of the principal means of making payments. A bank draft is merely a check on one bank drawn by another bank. A certified check is a private check which the bank on which it is drawn certifies or the payment of which it guarantees.

Bank checks do not circulate quite so freely among private individuals as money, because each check must be indorsed by each person through whose hands it passes. Therefore a check will be accepted only from a person whose signature is known to be genuine. Since, however, paper money circulates without indorsement, one will accept it from a stranger or a known rogue unless one has reasons for suspecting the money to be counterfeit or to have been stolen.

The clearing house. The vast increase in the use of bank checks in the making of payments created, long ago, the necessity for a special institution known as the clearing house. At the close of each day's business every bank in a large city finds itself in possession of a number of checks on each of the other banks. Originally messengers were sent the rounds, carrying bundles of checks—a cumbersome and an expensive process.

From this it was an easy transition to the organization of a regular clearing house to which all those checks were sent. This eventually became the heart of the whole financial district. Most of the bank clearings in this country are now done through the Federal Reserve banks. The clearing house is essentially a *banker's bank,* where banks make their payments to and collect their obligations from one another very much as private individuals who do business with the same bank make their payments to and collect their obligations from one another. The Federal Reserve banks are now in a peculiar sense fitted to act as the bank for the member banks, thus taking the place of the old-fashioned clearing house.

Domestic and foreign exchange. This habit of making payments by means of bank checks has extended beyond the limits of any city or of any country. Business transactions between cities and between countries are carried on in much the same way. This necessitates some convenient way of balancing payments from one city to another and from one country to another. The one method is known as domestic and the other as foreign exchange. If a man in one city, say Chicago, must pay for goods which he has bought in New York, and another man in Chicago is to receive an equal amount of money for goods which he has sold to someone in New York, it would be much simpler for the first man to pay the second man, thus canceling both debts, than for money to be sent both ways. Domestic exchange is merely a system on which this can be done on a large scale between all the large cities. If the men in question live in different countries as well as in different cities, the same problem arises and is complicated by the difference in the monetary systems of the different countries.

It will frequently happen that, for a time, more money is owed by citizens of one country, say the United States, to citizens of another, say England, than is owed by citizens of England to those of the United States. In such cases the debts do not exactly cancel one another. If Americans owe more to Englishmen than Englishmen to Americans, there is said to be an unfavorable balance of trade in America and a favorable one in England; that is, some money must flow from America to England to pay the balance, and in the opposite direction if the balance of trade is unfavorable to England and favorable to the United States. Rather than send money to England, when the balance is against us, paying the cost of transportation and losing the use of it for a time, those Americans who owe the money will try to find others who have money coming to them from England, and will even offer a small premium for bills on England. English, or sterling, exchange is then said to be above par; that is, the American who is to receive an English pound can sell his claim for a little more than $4.8665, which is its par value in American money. When the balance is the other way, sterling exchange is below par; that is, the man who has to wait and get his money from England will sell his claim for a little less than $4.8665 for each pound sterling. During the World War the English people had nothing to sell to us and much to buy from us. The balance was so overwhelmingly against them as to exhaust all their available gold, and they could not make any payments at all for a long time. The pound sterling naturally fell far below par, as it must in all such cases, depending on the probable lapse of time before trade can again reach a normal balance.

Dealers in foreign exchange are merely middlemen who buy and sell these obligations between countries. The man who has money coming to him from another country does not have to find a man who owes the same amount to the other country, he merely sells his claim to one of these dealers. Similarly the man who owes money to another country does not have to find a man who has the same amount coming to him from the same country. He merely goes to one of these dealers and buys a claim to cancel his

own obligation. It is largely through these dealers in foreign exchange that international payments are made with very few shipments of money.

Bank notes. Certain banks, such as national banks, have been permitted to perform the special function of issuing bank notes and thus providing a circulating medium which answers the purpose of money if it is not itself a form of money. They differ from the notes of an ordinary individual in that they pass from hand to hand without indorsement.

The national banking system. In 1863 the foundation of our present national banking system was laid, and a series of national banks was created, partly as a means of making a market for the bonds which the Federal government was offering for sale in order to get money with which to carry on the Civil War. Any bank chartered under this act was permitted to deposit bonds of the United States with the Secretary of the Treasury, and in return for these deposits it was permitted to circulate bank notes up to 90 per cent of the value of the bonds deposited. Thus, if a bank failed, the government had possession of enough of the bank's property to redeem all the notes which it had issued. In a sense the bank had pawned valuable property (that is, government bonds) and received a kind of pawn check in return. These "checks," called bank notes, it was permitted to circulate. This is essentially the characteristic of our bank notes at the present day. Subsequent acts have made some changes in the system, particularly the act of 1908, which permits a national bank to deposit certain other securities besides United States bonds as a basis for its note circulation.

The Federal Reserve system. The most important piece of banking legislation in this country since the National Bank Act of 1863 was the Federal Reserve Act of 1913. Under this act there was created under the Treasury Department of the United States a Federal Reserve Board consisting of five members, besides the Secretary of the Treasury and the Comptroller of the Currency. This board was charged with the general administration of the national banking system.

The country was then divided into twelve districts, and within each district a city was selected to be called a Federal Reserve city. The cities chosen were Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas, and San Francisco. In each of these cities was organized a Federal Reserve bank. This bank was to be the central bank of the Federal Reserve system in the district within which it was located.

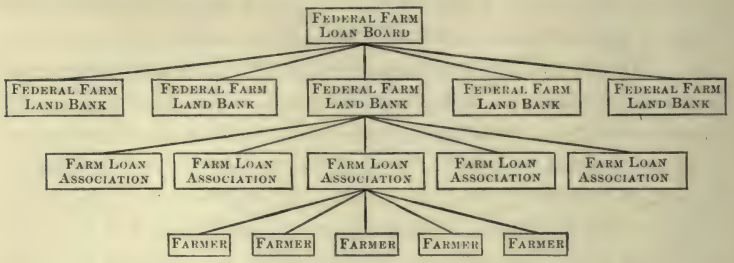
All the national banks, and all the state banks which wished to become national banks, by coming in under the Federal Reserve system were to become member banks and in a sense tributary to the Federal Reserve bank. The Federal Reserve bank thus becomes, in a sense, the bank of the member banks of its own district. It does no business directly with private individuals, aside from the purchase of bills of exchange in the open market. The Federal Reserve banks themselves carry on their clearing through a special branch of the Federal Reserve Board in Washington. This may be called the bank of the Federal Reserve banks.

Agricultural credit. The business of agriculture has been the slowest of all to make a large use of credit. One reason has been that there has been no machinery designed to provide the farmers with the kind of credit which they have needed, as the ordinary banks have provided the merchants and manufacturers with the kind which they have needed. The farmer needs comparatively little short-time credit, as the merchant and manufacturer understand that term. The bank which does a regular check and deposit business, whose deposits are continually being withdrawn and replenished, must keep its assets in liquid form. Farm mortgages are notoriously hard to dispose of, and no commercial bank would feel safe if it loaned a large proportion of its deposits out on that kind of security.

Even what the farmer calls short-time credit is too long for the average bank. The farmer can seldom use credit for less than three months, and he is more likely to need it for six, nine, or twelve months, whereas the city borrowers generally borrow for shorter periods, such as thirty, sixty, or ninety days.

The farmer's chief need, however, is for long-time, or mortgage, credit rather than for short-time, or personal, credit. In the purchase of a farm, in the making of durable improvements, or even in the stocking or equipping of the farm, considerable sums of money are required. If he borrows for these purposes he can scarcely hope to pay off his debt inside of a term of years. The mortgage is the only satisfactory form of security in cases of this kind.

A very important development of our banking system, designed to extend credit facilities to the farmers of the country, was begun by the act of 1916, inaugurating our Farm Land Bank system. The



general organization of this system resembled that of the Federal Reserve system. It is presided over by a central body known as the Federal Farm Loan Board. The country was divided into twelve districts, and in each district a city was selected as a headquarters for the Farm Land Bank. The Farm Land Bank was to operate throughout its own district in the organization of local Farm Loan Associations.

Each Farm Loan Association is to be an association of farm owners, or those about to become owners, who desire to borrow money by giving a mortgage as security. The individual farmer is to deal only with his local association. A group of farmers form themselves, according to specified rules and plans, into a Farm Loan Association. Each one who wishes to borrow money gives a mortgage on his farm to the association. The association then indorses the mortgages received from its own members and sends them to the Farm Land Bank of the district. The Farm Land

Bank then advances the money to the Farm Loan Association, and the association in turn advances the money to each of the farmers.

When the Farm Land Bank has a sufficient number of mortgages transferred to it in this way, it may deposit these mortgages with a custodian appointed by the Farm Loan Board, and it is then empowered to issue bonds to an equal amount and offer these bonds for sale to the general investing public. With the money received when it sells these bonds it may buy more mortgages from the local Farm Loan Associations within the district. On the basis of these new mortgages it may issue more bonds, and so on, till its outstanding bonds equal twenty times the capital of the Farm Land Bank.

The whole system is—like every other banking system—organized to deal especially in promises. The farmer who wants money gives in exchange for the money a written promise to pay it back, together with a low rate of interest. This written promise is transferred from the Farm Loan Association to the Farm Loan Bank and then to a custodian, who keeps it safely until it is redeemed. The Farm Land Bank, in order to raise money to buy the farmers' promises, issues promises of its own, called Farm Land Bonds, which promise to pay money and a low rate of interest to the holders. These promises, or bonds, are then sold for money to whomsoever will buy. This money is then used to buy other promises of other farmers or, as it is more commonly stated, to lend to other farmers on their promises to pay it back.

If men are permitted to work together on the basis of voluntary agreement, they will be pretty certain to see the advantages of doing a good deal of trading among themselves. It will sometimes happen that a man will want something at once and not have anything to give in exchange for it. If he is likely to have something in the future which could be given in exchange, he will have the problem of bridging that interval of time; that is, of getting at once what he wants and paying for it later. The seller is likely to want a pretty definite promise. If this promise is written down, then the man who receives it has something that can be transferred to another. Where there are many such promises in existence,

there is likely to be a good deal of exchanging. When these promises become not only numerous but of many different kinds, the business of dealing in them becomes a large and complicated business. It is known as banking.

EXERCISES

1. Under what conditions are promises generally accepted?
2. What is the business of a bank?
3. How does a bank get most of the money which it lends?
4. What does a bank do with most of the money which is deposited in it?
5. What service does the bank perform?
6. What is a savings deposit?
7. What is the use of a bank check?
8. What is a clearing house?
9. What is a bank note?
10. When did the National Banking system of the United States originate?
11. When did the Federal Reserve system originate? Describe it in general outline.
12. Describe the Federal Farm Loan system.
13. In what kinds of promises does it deal?

CHAPTER XXVI

COMMERCIAL CRISES

Confidence and stability. In the last chapter it was shown that promises to pay have come to play a very important part in our system of exchange. In fact, a large part of the business of the country is carried on by means of these promises to pay. Instead of paying cash at the time of a purchase, the buyer pays, first, with a promise; afterwards, with the thing—say money—which was promised.

It was further shown that this system of dealing in promises depends upon confidence. Let confidence be destroyed and no one would accept these promises. Then the would-be buyer could not buy until he could raise the cash. But if buyers postpone buying, sellers must necessarily postpone selling. This means that business necessarily slows down.

It was also shown that the system of dealing in promises to pay becomes highly complex in our banking system, where one set of promises to pay is balanced against another set. If those who borrow from the bank should fail to pay their notes, the bank would be unable to pay its depositors. These depositors, in turn, might be unable to pay the people to whom they owe money. This is only one phase of our interlocking system of credits. Under this system the failure of even a few men to fulfill their promises may destroy, temporarily at least, the whole credit system and cause widespread failure and bankruptcy.

Financial crises. The system of credits gives rise to one of the most important and most puzzling of all modern economic questions, namely, that of the frequent recurrence of financial crises and general industrial depressions. A financial crisis is an occasion when the money market becomes suddenly demoralized, confidence disappears, and credit shrinks. Everyone to whom money is owed

wants it at once, but no one wants to let go of any money in his possession, for fear that he may not be able to get any more. Besides, there does not seem to be money enough to pay off existing debts.

If you will imagine a group of men doing business with one another, where each one trusts every other, you will see that a large amount of business can be done with a ridiculously small amount of money. Many transactions will be carried on by means of promises to pay money instead of with the money itself. Many of these promises will be balanced against one another and canceled without the use of any money at all. In other cases the money will be used merely to pay balances. But if something should happen to destroy confidence, so that no one would accept promises, but everyone demanded real money, there might not be money enough to go around and make the necessary payments. In that case business would have to slow down, and only as much business would be done as could be done with the small amount of money available. If, in addition to this, everyone held on to all the money he could lay hands on, for fear that he might not be able to get any more, even the limited amount of money in circulation would move slowly, and business would have to slow down still more. A swift dollar may pass from hand to hand many times in a day, and in this case it will do a large amount of business; but a slow dollar passes from hand to hand only a few times a day and does a small amount of business.

Industrial depression. An industrial depression is usually more deep-seated than a financial crisis and usually lasts for a longer time. It is a general slowing down of production because of an inability to sell goods or to get satisfactory prices for them.

Various explanations, some intelligent and some absurd, have been offered to account for these depressions. Overproduction is one of the most common and least intelligent. There may be such a thing as disproportionate production, but such a thing as general overproduction is a logical impossibility. The production and supplying of one thing is a demand for something else; the more production, the more demand. But if some things are produced

and offered for sale, and there is no demand for them, it may mean either that those few things are overproduced or that the other things which might be exchanged for them are underproduced. In either case it is disproportionate production.

The overproduction theory. One phase of the overproduction theory of industrial depression is that wages are so low that the laborer is not able to buy his own products. It is argued that this results in an overproduction and glut on the market.

There are many excellent reasons why wages should be higher than they are, but this is not one of them. So far as its effect on the general purchasing power of the community is concerned, it makes no difference whether wages are high and rent, interest, and profits are low, or whether wages are low and rent, interest, and profits are high. If the laborer gets a small share of the production of a given industry, and the managers, landowners, and capitalists get a large share, these have large purchasing power and the laborer small purchasing power.

The value of the whole product of every industry goes to these various classes, and they have it all to spend. If one class possesses a large share, and another class a small share, the total amount to be spent for other commodities is not affected by that distribution. If the laborers get absolutely the whole product of an industry, there will be no more to spend on other products than if the laborers get one half the product and the other participants get the other half. This, let it be repeated, has nothing to do with other and excellent reasons why wages should be high.

The periodicity theory. A certain periodicity has been observed in the recurrence of crises and depressions. It is not always easy to determine just the interval that elapses between depressions. Sometimes they come approximately twenty years apart, but they have a disconcerting habit of coming at unexpected times. In his book on "Economic Crises," Jones gives the table on the following page:[1]

[1] Edward D. Jones, Economic Crises. The Macmillan Company, New York, 1900.

LIST OF ECONOMIC CRISES

United States	England	France	United States	England	France
——	1792–1793	——	1847	1847	1847
——	1796	——	——	——	1855
——	——	1804	1857	1857	1857
——	1810–1811	——	——	1866	——
1812	——	——	1869	——	——
——	——	1813	1873	1873	1873
——	1815	——	——	——	1882
1818	——	1818	1884	——	1884–1885
1825	1825	1825	1890	1890	1890
——	——	1830	1893	——	1893
1837–1839	1836–1839	1836–1839			

In the nineteenth century it will be noticed that there were severe crises in 1818, 1837, 1857, with lesser crises in 1825 and 1847. The severe crises seemed to come every twenty years for almost half a century. Again, there were severe crises in 1873 and 1893, with a less severe one in 1884. Another one occurred in 1907.

Various attempts have been made to explain this apparent periodicity. The late William Stanley Jevons developed an interesting theory of the coördination between sun-spot cycles and industrial depressions. The sun-spot cycles, he argued, had a profound effect on the weather, rainfall, etc., and these in turn affected the agricultural basis of the world's wealth. This theory, however, had not been taken seriously by the economists until it was recently revived by the interesting observations of Professor Ellsworth Huntington. It is true he has not developed the theory at great length as applied to economic crises, but he has presented strong evidence in favor of the doctrine that solar disturbances profoundly affect climatic conditions and rainfall, and these in turn have produced great historical and economic disturbances.[1]

[1] Ellsworth Huntington, "Climatic Changes and Agricultural Exhaustion as Elements in the Fall of Rome," *Quarterly Journal of Economics*, February, 1917. See also "The Pulse of Asia," Houghton Mifflin Company, Boston, 1907.

The overspeculation theory. There is a persistent belief among all students of the question that overspeculation has something to do with depressions. When a fever of speculation takes possession of a community, the prices paid for the articles in which people are speculating do not bear any logical relation to their real values. The speculator will pay any price for anything, provided he thinks he can sell it later at a still higher price. When prices are tending rapidly upward he may rely on the mere momentum to carry them higher. There is only one possible outcome of this tendency—a rapid fall in the prices of the commodities in which men are speculating.

Even though the speculation takes place in a single article, it may produce a profound economic disturbance. The money that is absorbed in the speculative purchasing of the article in question is necessarily withdrawn from other kinds of business. This in itself produces some disturbance. When a fall in prices begins, a general bankruptcy among the speculators takes place. When a number of men become bankrupt and are unable to pay their obligations, a process begins which may be compared to knocking over one brick in a row of bricks standing close together. If one individual who owes money to another fails to pay his debt, the latter, not being able to collect his money, fails to pay his obligations to a third, and so on; one after another fails, and the bankruptcy spreads throughout the community in a sort of wave motion.

The real-estate boom. The wave of speculation in land which is known as a real-estate boom is one of the most interesting and instructive of all subjects of economic study. No one has ever been able to explain just how it starts; but after it has started, it is not so difficult to understand. Something happens, let us say, such as the building of a new railroad, the opening of a new mine, or the location of a new factory, to produce a very rapid rise in the price of city lots. Men double and quadruple their money in a short time by merely buying and selling again at a higher price. This sets them and others crazy. Everyone wants to buy lots for the purpose of selling again. The first effect is to increase

greatly the number of buyers, and the effect of this is to send the prices still higher. These buyers, as a consequence, also make money rapidly. This attracts still other buyers, some of them coming from long distances to share in the harvest. So long as buyers are increasing faster than sellers, prices continue to go up; but when the buyers become less numerous than the sellers, which must inevitably happen, prices begin to fall. Suddenly everyone becomes a seller, and there are no buyers at all. Stagnation, depression, bankruptcy, and general ruin ensue.

The recovery is very slow. The men who are left with land on their hands are not fitted to use it. They did not want it for use; they wanted it only to sell. This means an inefficient use of the land. Besides, even those owners who are fitted to put the land to an economic use are handicapped because they put too much money into the land and have too little with which to develop or use it. Those who were lucky enough to sell out in good time are very careful not to let go of their money or to invest it in productive industry. Years usually elapse before the city recovers from the disaster.

The overinvestment theory means merely that there has been overinvestment in certain industries, thus producing an unbalanced industrial system. It should, strictly, be called disproportionate investment rather than overinvestment.

Investment should always be carefully distinguished from speculation. The speculator buys merely to sell again at a higher price, without performing even the mercantile function of saving the time of producers and consumers. The investor buys producers' goods or durable consumers' goods with the idea of using them himself or of keeping them as a source of income.

Overinvestment in the railroads of the Far West is supposed to have had something to do with the panic of 1857. The railroads were built, the money was spent on their construction, and then it began to appear that it would be some years before there would be business enough to put the railroads on a paying basis. Meanwhile all that capital had been diverted from other industries, which suffered in consequence. In many cases, however, the shares

of the new railroad enterprises had been bought on credit. As soon as it appeared that dividends were not to be speedily forthcoming, the value of the shares fell rapidly, and those who had invested on credit in many cases suffered bankruptcy.

There is something also in the very nature of modern industry which seems to render it highly sensitive. The countries which show the largest amount of enterprise and the adventuring spirit not only expand most rapidly but also, at the same time, seem to have the largest number of industrial depressions. The tendency to rush headlong into new enterprises is doubtless an important factor in national expansion, but it also produces a severe reaction when this headlong spirit rushes too far in a given direction.

A special phase of the overinvestment theory is found in the growing importance of the investors' market as distinguished from the consumers' market. There are fundamental reasons why there should be violent fluctuations of the value of producers' goods on the investors' market.

Let us begin by noticing a few elementary facts. Every farmer knows that a horse which will not earn more than his feed, or a piece of land which will not produce more than it costs to cultivate it, is of no value. Likewise every business man knows that an establishment that cannot be made to pay more than running expenses is worth nothing except as junk.

This is equivalent to saying that the value of such an establishment—or, indeed, of any productive agent—is determined not by the total value of its product but by the excess of that total value over and above the running expenses. When the running expenses are high and the output large, so that the earnings depend upon small profits and large sales, a very slight rise in the value of the product may double or more than double the value of the establishment, provided, of course, that the rise in value is believed to be permanent.

Let us suppose that a certain shoe factory can be made to turn out 100,000 pairs of shoes in a year at a uniform cost of $5 a pair. If these shoes cannot be sold at more than $5 a pair, the plant is worthless; but if they can be sold at $5.25 a pair, the earnings

of the plant will be $25,000, which, capitalized at 5 per cent, will make the plant worth $500,000. If, however, the price of shoes should rise to $5.50, the earnings of the plant would be doubled; and if this rise in value were believed to be permanent, the value of the plant would be doubled. Thus an increase of only one twentieth in the value of the product would double the value of the plant. In the same way, a subsequent fall of one twentieth in the value of the product would reduce the value of the plant by one half, while a fall of one tenth in the value of the product would destroy the value of the plant altogether.

This may be stated as a general law to the effect that a slight fluctuation in the value of a product tends to produce a violent fluctuation in the value of the establishment producing it. Stated in still more general terms, the value of producers' goods tends to fluctuate more violently than the value of consumers' goods.

Most of these causes of commercial crises and industrial depressions are difficult to cure by any kind of legislation. So long as men are free to buy and sell as they like, there will be the possibility of unwise buying and selling. Until men become wise enough to buy and sell wisely, there may be a good deal of bankruptcy. When a craze of unwise buying and selling takes place, it is likely to be followed by wholesale bankruptcy, the loss of confidence, the slowing down of business, and general hard times. Possibly the government may curb certain kinds of speculation, but there are so many possible kinds as to cause one to doubt whether attempted suppression can have a great deal of influence or not. The general spread of business intelligence, the habit of careful and farsighted buying and selling, and the gradual decline of the gambling spirit in business will probably do more than legislation.

EXERCISES

1. What effect does a sudden lack of confidence have upon business?
2. What is meant by a financial crisis?
3. What is meant by an industrial depression?
4. Can there be such a thing as general overproduction?

5. What is meant by disproportionate production?

6. What is meant by the periodicity of industrial depressions?

7. When did the principal industrial depressions occur in this country?

8. What is meant by the overspeculation theory?

9. Describe the progress and the end of a real-estate boom.

10. What is meant by the overinvestment theory?

11. Why does the investors' market fluctuate more than the consumers' market?

CHAPTER XXVII

INTERNATIONAL TRADE

Advantages of exchange among individuals of the same country. Freedom of exchange between individuals is so clearly advantageous that practically no one advocates serious restrictions upon it. Freedom of trade between different sections of the same country is also generally approved. It would seem absurd for the South, which is peculiarly adapted to cotton growing, to try to be entirely self-supporting, and especially to produce certain things, such as wheat, for which its soil and climate are not so well suited as are those of other sections of the country. No one would advocate seriously an interference with the shipments of wheat and wheat flour to the South or of cotton to the North.

Advantages of exchange among individuals of different countries. It is held by a large majority of the students of economics that the same arguments which favor a policy of freedom of exchange within the country are equally strong in favor of freedom of exchange between different countries.

The diversion of labor and capital from the more productive into the less productive industries. The positive argument in favor of freedom of international trade rests upon one or two fundamental propositions. One of these is that the labor and capital of any region will tend of themselves to seek those opportunities and to develop those industries which are most profitable. From this it would follow that any interference with this process, or any attempt to develop an industry in a region where it would not develop without special favors, must necessarily be a mistake. It would merely divert labor and capital from a more productive to a less productive industry.

Against this fundamental proposition of the free-trade school the protectionists have never been able to launch a successful frontal attack.

There are, however, six popular arguments in favor of protection, besides some others that are not so popular, though perhaps of greater scientific weight. These six popular arguments may be characterized as follows: (1) the balance-of-trade argument; (2) the home-market argument; (3) the infant-industries argument; (4) the standard-of-living argument; (5) the anti-dumping argument; and (6) the necessity-for-military-supplies argument.

The balance-of-trade argument. By the balance-of-trade argument is meant the old theory that a nation is rich when it sells abroad more than it buys. There is a certain superficial analogy between the condition of the private individual and that of the nation. It look at first thought as though the private individual who was selling more than he was buying was getting rich. This, however, is only an appearance. It is true that so long as he is selling more than he is buying he is accumulating money, but unless he sooner or later invests that money it will do him no good. The individual who accumulates money for a time, say for a year, is accumulating the power to purchase something else at a later time; but suppose that during the next year he invests all the accumulations of the preceding year, then it will happen that during this next year he will be buying more than he will be selling. No one will argue that he grows poorer by the process.

Similarly with the nation that continually sells more than it buys,—if it never buys anything from the outside with that money, the money is of no use to it; if it merely keeps it in circulation within its own boundaries, it will have more money in circulation, but no more goods.

Nothing could be more elementary or more incontrovertible than that every country must in the long run pay for its foreign supplies with its own products. If it happens to produce gold and silver in large quantities, these of course must be reckoned among its own products, and it may pay for a portion of its foreign supplies with this gold and silver. In the long run, therefore, the country that restricts importation must necessarily, and in exactly the same degree, restrict exportation.

The home-market argument. The home-market argument has been peculiarly effective with farmers. It has been pointed out to them that unless factories are built up in their own neighborhood, they must depend upon distant markets for the sale of their products. To sell their products in these distant markets and get their own supplies back, it is said, involves heavy expenses in the form of freight rates. If these expenses, however, were so heavy as to overbalance the other advantages and disadvantages involved, manufacturing would be developed in the home market without any government aid or interference. If, for example, the difference in the cost of growing wheat in Alabama and North Dakota were less than the freight rates from North Dakota to Alabama, Alabama would find it advantageous, without any government help, to grow her own wheat; but if it costs, let us say, twenty cents more per bushel to grow wheat in Alabama than in North Dakota, and the freight rate is only ten cents, then it would be more profitable to import wheat or wheat flour from North Dakota.

The infant-industries argument. As to the infant-industries argument, there is undoubtedly something to be said on the side of protection. The argument is good, however, only on condition that the infant industry, after it is once established and ceases to be an infant, is able to take care of itself without further protection. If it is not, and if it continually needs protection, it becomes not a policy for the protection of infant industries but a policy for the protection of those that are in a state of senile decay. It is a policy for keeping alive industries that ought to be dead.

There is another rather fundamental objection to a protective policy based on the infant-industries argument. No matter how much protection is given to any industry, there will always be certain establishments that are just on the margin of bankruptcy. There will be men who are so poorly qualified for managing a business, or who have located their businesses in such disadvantageous places, that they have to compete with more productive industries for their labor and supplies, and are thus barely able to keep going. Any attempt to double and treble the amount of

protection merely calls into existence business establishments run by less qualified managers or located in less advantageous positions, so that with respect to business establishments it becomes a truism that "the poor ye have always with you." Conversely, any attempt to take away or reduce the amount of protection will necessarily mean bankruptcy to those marginal establishments. They can always bring pressure to bear upon Congress and can always show convincingly that they would be ruined if protection were taken away. Thus the infant-industries argument sooner or later inevitably becomes an argument in behalf of the inefficient producer.

The standard-of-living argument. By the standard-of-living argument is meant the argument that since American laborers get higher wages and maintain a higher and more expensive standard of living than most foreign laborers, it is necessary to compensate the manufacturer for these higher wages by enabling him to get somewhat higher prices for his product. From the free-trader's point of view this looks like putting the cart before the horse. The reason why wages are higher in one country than in another is because labor is more productive in the one than in the other. If labor is more productive the laborer creates the product out of which his higher wages are to be paid. We have had such an abundance of natural resources and, on the whole, compared with old and overcrowded countries, such a dearth of labor that the marginal productivity of labor has been high in this country. The unprotected industries pay these wages as well as the protected. Therefore it would be a mistake to tax the more productive industries in order to allow a bounty or a higher price to the less productive industry.

The anti-dumping argument. As to the anti-dumping argument, there is a certain justification for it. By the anti-dumping argument is meant the argument that an old and well-established industry may, whenever it finds itself with a surplus product which is difficult to sell in its own country, offer it for sale in a foreign country far below the cost of production; or, as the argument is put in the country where protection is advocated, the foreign

producer may dump his surplus onto our markets and demoralize the business of production here.

In so far as this dumping policy is temporary and spasmodic, there is a good deal to be said in favor of a policy which will restrict it. If, for example, a group of foreign manufacturers were to dispose of a temporary surplus in this country far below the cost of production, and keep it up spasmodically for a few years, it might cause bankruptcy among our own producers and discourage others from entering the business. As a result we might find ourselves in a short time with no industry of our own in that field. Then the foreign producers would no longer need to dump their surplus onto us, but could charge us a good high price.

On the other hand, if the policy of dumping a surplus product onto us is a permanent one, there is everything to be said in favor of allowing it to go on and allowing the home industry to die out. It merely enables us to get permanently a product much cheaper than we could produce it ourselves. The labor and capital which would otherwise be engaged in this industry would now better be engaged in some other.

The military-defense argument. So long as war is a possibility the necessity for military defense will remain with us; and so long as we must be prepared for military defense the argument in favor of producing certain essential military supplies at home, even at greater cost than they could be produced abroad, will be overwhelming. It is obvious that at the very time when we need military supplies most—in time of war—we may not be able to get them at all if we depend upon foreign sources. This would apply not only to military supplies in the technical sense, such as guns and ammunitions, but also to every article which is indispensable in time of war. It might easily happen that a nation would fail in its military operations by reason of a lack of some single military article like nitrogen or copper, and suffer a national disaster and humiliation in consequence. Until we can be reasonably certain that war has been permanently eliminated, the argument for government encouragement of the production of every indispensable military article is overwhelming.

EXERCISES

1. If it is advantageous to permit near neighbors to exchange products, why is it not advantageous to permit distant neighbors to do the same if they care to do so?

2. If two individuals who live in the same country find it to their mutual advantage to trade in legitimate commodities, should they be forbidden to do so? Suppose they live in different countries?

3. What is meant by the balance-of-trade argument? How far is it valid?

4. What is meant by the home-market argument? How far is it valid?

5. What is meant by the infant-industries argument? How far is it valid?

6. What is meant by the standard-of-living argument? How far is it valid?

7. What is meant by the anti-dumping argument? How far is it valid?

8. What is meant by the necessity-for-military-supplies argument? How far is it valid?

PART FIVE. DIVIDING THE PRODUCT OF INDUSTRY

CHAPTER XXVIII

THE BARGAINING PROCESS

Voluntary agreement. We saw in Part Four that the exchanging of goods and services forms an important part of the economic life of every nation. This involves a vast amount of bargaining. Under this system the average man's prosperity will depend largely upon whether he can bargain advantageously or not. If he has some product or some service to sell, and is in a favorable position for selling it, he will prosper; otherwise not. This bargaining process, however, is a part of the system of voluntary agreement, which is the basis of all human relations in free countries. Why some prosper and others fail under this process, or why some prosper more than others under it, is one of the most important of all economic questions. If we can answer that question we shall have the explanation of the great inequalities of riches and poverty which form so regrettable a phase of modern life. If we can find the explanation of these inequalities in bargaining power, we shall then be in a position to apply remedies. Without this explanation we can know nothing whatever about remedies.

Universal abhorrence of violence and fraud. But, first, let us go back to first principles. Every civilized country regards violence and fraud as hateful. In our country, in particular, and in others with the same moral ideas as ourselves, it is recognized as wrong for anyone to get any desirable thing by either of these methods. Consequently the laws of the land refuse to recognize anyone's title to anything which he gets by either of these methods. There is also a tendency to recognize his title to anything which he can secure by any other method whatsoever and, when he has once got it by any other method, to protect him in its possession against all violent or fraudulent methods of dispossessing him of it.

Other methods of getting what you want. What are the other possible methods by which a man can get what he wants? First, he may find and appropriate it, provided no one else has already appropriated it. Second, he may make it, if it is a thing which can be made and if he can get the raw materials without violence or fraud. Third, he may get it from someone else. But since he is forbidden to use violence or fraud, he must get it from someone else with that person's full and free consent—that is, by his voluntary agreement to give it up. Therefore, there are not many ways of getting the thing you want from another person. (1) You may secure it as a gift. (2) You may inherit it. (3) You may get it in peaceful and voluntary exchange.

Finding, making, and buying. All of these methods are recognized by the laws of our country and of most civilized countries. "Finding is keeping" is an old adage which recognizes the superior claim of the person who first finds a thing. Your only way of getting it away from him, under the system of voluntary agreement, unless he decides to give it to you of his own good will, is to buy it of him. You are not allowed to take it from him by violence or fraud. Again, if he makes it from materials which he has secured without force or fraud, it is recognized as his, and no one can take it from him except by his own free consent. Finally, if you do secure it from either its finder or its maker by his free consent, without force or fraud, by a peaceful and voluntary exchange, then it is yours in as full and complete a sense as it was his before the exchange. You are now, as he was before, protected against force or fraud, and no one else can get it from you except by the method of voluntary agreement.

The frequent desire to get something which someone else possesses, leads, under this system of voluntary agreement, wherein force and fraud are forbidden, to the vast process of exchange and the all but universal bargaining process. In this age of specialization no one can find or produce everything that he wants. Everybody, therefore, wants many things which he can get from other people only by the bargaining process. How many of these things he can get will depend upon what he has to give in exchange and

how much power in exchange these things have, or how much bargaining power they give him.

Sources of unusual bargaining power. Some few become immensely rich by finding something which possesses great power in exchange. One who finds hidden treasure, a gold mine, a rich oil or gas well, is regarded as having come legally into possession of it. He is therefore protected against force or fraud as impartially as though he had found or made an article of little value or importance. Under the system of voluntary agreement he may become a very rich man, merely because he happened to find something which other people want and for which they are willing to pay him large sums. It is true that he did not produce his wealth, neither did any of those who want to get it away from him. He has not robbed nor defrauded anybody, and the law, as it now is, will not permit anybody else to rob or defraud him.

Again, if he is such a genius as to make something which others want badly and for which they are willing to pay large sums, he may become immensely rich. Being protected against force and fraud, he cannot be dispossessed without his consent, and if he chooses to ask a high price, there is nothing to do but to pay it or do without the article.

Again, if he brings something to the free and open market, by peaceful and voluntary exchange, robbing and defrauding nobody, its price may go up or down. If it goes up it is because people decide that they want it more intensely than they did before. Nevertheless, under our laws against force and fraud, he cannot be dispossessed except by peaceful and voluntary exchange. If he sees fit to exact a high price, and the circumstances are such as to give him great bargaining power, he is likely to prosper.

Inequalities of bargaining power. These possibilities are mentioned to show that under our system of voluntary agreement and the bargaining process great bargaining power and great prosperity may come to a man occasionally through no fault and no merit of his own. An equal number of illustrations could be furnished to show that low bargaining power and low prosperity may occasionally come to a man through no merit and no fault of

his own. Nevertheless, with all these possibilities in mind, wise men will think twice before deciding to give up the system of voluntary agreement. It has its dangers, but, with all its faults, it has proved the best system that has ever been tried. It is the only system under which free men can possibly live.

Aside from lucky finds, strokes of genius, and fortunate turns of the market, what are the conditions that give greater bargaining power to one class than to another? The answer must be found by studying the conditions of the market in which they sell their products or their services. In the following chapter we shall study some of the fundamental conditions which determine the market value of the services which each class has to sell.

EXERCISES

1. What is meant by the bargaining process?

2. What bearing has it upon differences in prosperity?

3. Suppose bargaining power to be equal among all people, could there be any great differences in prosperity?

4. If you have something which many want and which few possess, does it give you great bargaining power or small bargaining power?

5. If you have something which few want and many possess, does it give you great bargaining power or small bargaining power?

6. If you can do something which many want to have done, but which few can do as well as you can, is your bargaining power great or small?

7. If you are only able to do something which many others can do as well as you can, and which few care to have done, is your bargaining power great or small?

8. Could many things be done by voluntary agreement among free citizens if violence or fraud were generally permitted?

9. If you are not permitted to use violence or fraud, how could you get from another citizen something which he has and which you want?

10. Suppose that the price of what you possess rises or falls on the market, how does that affect your bargaining power?

11. Can there be a free country where men are not free to do a great many things by voluntary agreement among themselves? Does this mean that there will be a great deal of bargaining?

CHAPTER XXIX

THE LAW OF VARIABLE PROPORTIONS

Prosperity and bargaining power. The ability of individuals or classes to prosper under the system of voluntary agreement will depend upon their ability to sell whatever they have to sell at a good price. It is mainly a matter of market conditions. The laborers, who have labor to sell, may adopt various bargaining devices, but in the main the price of their labor will depend upon market conditions rather than upon their bargaining methods or devices. The same will be true of the landowners, the capitalists, the technicians, the independent business men, and every other class. Our first problem must be, therefore, to study the market value of each factor of production in order to find out why the seller in each case gets a large or a small share.

Income a price received for services. The income of each class, however, is a flow rather than a fund or a lump sum. The laborer sells not himself, but the flow of productive energy which he can exert during a given period of time. The capitalist derives income not by selling his capital, but by selling the flow of utilities which come from his capital during a given period of time. The landowner does the same with his land. The following outline will indicate the relation of these various problems to the general problem of valuation. For convenience the flow of utilities yielded by the various factors of production is called services.

- VALUATION
  - Of goods
    - Consumers' goods
    - Producers' goods
      - Land
      - Capital
      - Laborers (under slavery)
  - Of services
    - Of land (yielding rent)
    - Of capital (yielding interest)
    - Of laborers (earning wages)

Why productive agents are desired. The reason for paying for an agent of production is that it helps to produce something which is desirable. Its value is derived from that of its products. If its product has a high value the productive agent is likely also to have a high value. In other words, it will give its possessor great bargaining power.

When several things have to be combined in order to produce a product, these things are called factors of production. The possessor of one factor may possess greater bargaining power than the possessor of another factor. In that case the one will get a larger share of the total value of the product than the other. Another way of saying the same thing is that one factor has more value than the other.

Why one productive agent commands a larger share of the product than another. Since a factor of production has value only because of its product, if one factor has more value than another it must be because it is believed that it contributes more value to the product than the other contributes. Why this belief exists is one of the most difficult of all economic problems. The student is requested to study the following analysis very carefully and without prejudice.

Need of a proper balance. In Chapter XV we learned of the importance of a proper balance among the different factors or substances that have to be combined in order to get a desirable result. This is as true when the desired result is the production of a commodity as when it is the preparation of a dish or any article of consumption. To choose a single example out of many: when there is an abundance of cranberries and a scarcity of sugar it is difficult to produce satisfactory cranberry sauce in large quantities, in spite of the abundance of cranberries. People will desire more sugar than they have, and desire it intensely, while they will not desire more cranberries so very intensely when they cannot get sugar to go with them. This intense desire for more sugar, and the lack of an intense desire for more cranberries, will make it easy to sell sugar and hard to sell cranberries. Those who have sugar to sell are in a favorable position for bargaining,

while those who have cranberries to sell are in an unfavorable position. Temporarily, at least, sugar will command a larger share of the value of the sauce, and cranberries a smaller share, than would be the case if sugar were more abundant and cranberries scarcer.

But labor, land, and tools have to be combined for the production of most commodities as certainly as sugar and cranberries have to be combined in the production of cranberry sauce. If these factors of production are not found in well-balanced proportions, one class is likely to be more favorably situated than another with respect to bargaining. Again, many different kinds of labor and many different kinds of tools frequently have to be combined in order to get a product. If these different kinds are not found in well-balanced proportion, there is as certain to be a difference of prosperity as there is between the sellers of sugar and the sellers of cranberries in a time of sugar shortage.

No matter how many hodcarriers and brickmakers there are in a given neighborhood, if there is a scarcity of brick masons, not many brick houses can be built. It would not add much to the production of brick houses to produce a lot of new bricks or to bring in a number of additional hodcarriers. However intensely men desired new brick houses, there would not be a very intense desire for hodcarriers or brickmakers, but there would be an intense desire for brick masons. It is easy to see that under these conditions brick masons would be more prosperous than hodcarriers or brickmakers; in other words, masons would command a larger share and the others a smaller share of the total value of a house built by the joint labor of all than would be the case if brick masons were not so scarce.

This is a principle of the very widest application. It applies not simply to the preparation of a dish in which the ingredient that is scarce and hard to get will be eagerly sought after while the one that is abundant and easy to get will not; it applies equally to the combination of different kinds of labor, different kinds of tools and machines, to the combination of labor and capital and of labor and land. In every combination of factors of

production the factor that is scarce and hard to find in sufficient quantity to balance the other factors will be eagerly sought after. They who possess it will have great bargaining power in any free country. On the other hand, the factor which is overabundant, which is easy to find in quantities greater than necessary to balance the other factors, will not be eagerly sought after. They who possess this factor will have little bargaining power. They must seek for buyers and take what they can get.

These results are unavoidable so long as we are in a country where things are done by voluntary agreement or where free bargaining exists. We must submit to it or else do away with the system of voluntary agreement and substitute a system of authority, such as exists in a great military organization.

This does not mean, however, that there is no cure for poverty or for inequalities in prosperity. It is possible so to equalize bargaining power, by balancing the factors of production, as to diffuse prosperity among all classes and still leave them free men. How this can be done will be shown in the last chapter of this book.

EXERCISES

1. Upon what does the bargaining power of a man or a class mainly depend, their shrewdness as traders or the conditions of the market?

2. Why are factors of production desired?

3. What determines how much they are desired?

4. What is meant by a balance among the factors of production?

5. When one of the necessary ingredients of a dish is scarce and hard to find and another is abundant and easy to find, which is likely to sell more readily?

6. Who is likely to get the larger share of the value of the dish, the one who supplies the scarce ingredient or the one who supplies the abundant ingredient?

7. Could it be otherwise in a free country?

8. When both ingredients are equally scarce or equally abundant, relatively to the need for them, would there be any great difference in their salability?

CHAPTER XXX

THE GENERAL NATURE OF THE WAGE QUESTION

How intensely is a man's labor desired? The price of labor, like the price of commodities, depends upon how much it is desired in comparison with other things. The question is not how intense is the need or desire for labor in general, nor how great would be the loss if all labor were wiped out of existence. The question is how intense is the need for the labor of the individual men who are looking for work.

The need for more labor rather than the absolute need for labor. It may be true that if there were no labor of a given class, say that of ditch diggers, the community would suffer terribly. Nevertheless, there may be so many ditch diggers that the addition of one to the total number would add very little to, and the subtraction of one would subtract very little from, the well-being of the community. The indispensable man, like the indispensable commodity, commands the high price. The man who can be easily spared, like the superfluous commodity, brings the low price.

The functional theory of wages. This may be called the functional theory of wages, and it forms a part of the functional theory of value which was outlined in a previous chapter. The function of a high price, in the economy of the nation, is to call into existence a larger supply of the thing for which it is offered. The function of a low price is to discourage the production and reduce the supply of the thing for which it is offered. If a larger supply is desired or needed, a high price is the means of getting it. If a larger supply is not desired or needed, a low price is the means of checking, limiting, or reducing the supply. Find out, in any given case, how much better off a community would be, or thinks it would be if it had more of a given thing than it now has,

and you have a fair measure of the reward which it could afford, or thinks it could afford, to pay in order to get more.

There may be members of the community who desire intensely to possess a certain commodity or to hire a certain kind of labor, but who have not the wherewithal to purchase or hire it. They will therefore have little influence on the price or the wages. This impecunious condition may be due to the fact that others have no great desire for the labor or the products of the persons in question. In that case the community does not value their services very highly, and therefore their desires have little influence on the market for other things or other services.

Productive labor is wanted because of its product. Our next task is to find out what determines how much the labor of any particular man or group of men is wanted. In the simplest possible case—that of a laborer who, without any help from anybody else, produces a complete article—his labor is needed just as much as and no more than the article itself is needed. The price of the article, then, is his reward. If he is not satisfied with his income he must find fault with the price which the consumer pays for the product, for he gets the whole price. This, however, is a case so simple as to be very exceptional. Very few finished products are produced by the labor of a single person. One who goes out into the woods and gathers nuts or berries, carries them in vessels which he has himself improvised, and sells them directly to consumers may come under this class.

Goods generally produced by the joint labor of a number of persons. We are sometimes told that most goods are socially produced. It would be better to say that most goods are produced by the joint efforts of several persons. The total reward which can go to all of them cannot in the long run exceed the total value of the finished product. This must be divided among all those who have taken part in its production. The price of the loaf of bread must reward all those who have had any part in its production, including the baker, the miller, the various transportation agencies, and the farmer, as well as the manufacturers of the farmer's, the baker's, and the miller's tools, and so on back to the

lumbermen and the miners who extracted the raw material out of which the tools were made.

The successive division of labor does not create a very difficult problem in distribution. Division of labor is of two kinds: contemporaneous and successive. We have the successive division of labor among the farmer, the miller, the railroad, and the baker, since, one after the other, they work upon the same material. We have an example of the contemporaneous division of labor in the case of the mill owner and his employees of various kinds, the railroad company and its employees, the farmer and his hired men, and so on. The problem of distributing the price of the finished product among those who work upon the raw material in regular succession is simply a problem in the price of commodities. Thus the reward of the farming group comes to them in the form of the price of wheat. This price must then be distributed among the contemporaneous workers on the farm; that is, the farmer himself and his hired men. The difference between the price of wheat and the price of flour and its by-products must furnish the reward for the milling group, and the difference between the price of flour and the price of bread must furnish the total reward for the baking group.

All this is fairly simple and leads to no serious social problem. The commodity market is supposed to take care of it, and social reformers in general have not exercised themselves to any great extent on the subject. Occasionally, of course, someone is accused of cornering wheat or manipulating the price of flour.

The division of the product among contemporaneous workers the difficult problem. The great social problem of today, so far as it relates to the distribution of wealth, is the problem of distributing the price of the product among the contemporaneous workers. Of the total price of wheat, how much should go to the landowner (if he is a different man from the farmer), how much to the farmer, how much to the laborer, how much to the capitalist (if he is a different man from the farmer)? Or, again, of the total spread between the price of wheat and the price of flour, which furnishes the total reward to the milling group, how much goes to the owner of the mill site, how much to the manager,

and how much to the various types of laborers? And so on through the transportation groups and the baking groups, the difficult problem is always that of the distribution of the total earnings of the group among the contemporaneous workers within it.

The law of variable proportions again. Not much headway can ever be made in the study of this problem unless we hold carefully in mind the law of variable proportions as explained in the last chapter. When it is suggested, for example, that each factor of production should be paid for in proportion to its contribution to the product, any student who does not understand the law of variable proportions is likely to say that there is no way of finding out what each factor contributes. He will say, for example, that it is like trying to find out how much of the welding is done by the anvil and how much by the hammer, or how much of the cutting by the upper and how much by the lower blade of the scissors.

To use this comparison is to show that one does not understand the problem. If one blade of the scissors were a little longer than the other, it would not require any so-called metaphysical or theoretical reasoning to see that the scissors might be improved by lengthening the shorter blade. If two workmen were to offer their services, one to lengthen the longer blade and one to lengthen the shorter blade, it would not take much of a philosopher to decide which workman it would be better to hire. The workman who would lengthen the shorter blade would add somewhat more to the cutting power of the scissors than the workman who would lengthen the longer blade.

How important is it that we have more of a certain thing? Most economic problems, as pointed out many times already in this volume, relate to the problems of more or less, of improvement or deterioration, of readjustment of existing equipment, organization, etc. If, for example, a farmer found that he could increase his crop more by having extra help than by having more land, he would be more likely to offer wages to someone than to offer rent to someone else. If farmers generally felt that way about it, wages would be high and rent low. Under the opposite conditions rent would be high and wages low.

Under the law of variable proportions, or that special phase of it known as the law of diminishing returns from land, it is actually found that in a community where there is an abundance of good land but a scarcity of labor to work it, the addition of one or more laborers to the existing number will make a considerable difference in the crop. That is a sufficient reason for paying high wages to labor. Additional laborers are very much needed; the agricultural situation would be very much improved by having more laborers and would be very much injured if any were lost. The question of more laborers or fewer laborers is one of considerable importance.

On the other hand, where land is so abundant and laborers so few that it is difficult to cultivate the existing land, it would not be of much advantage to production to have a few more acres, nor much of a disadvantage to have a few less. The question of more or less is not, in this case, very important. This is the question which presents itself to the practical farmers. The question as to which is absolutely more important, land or labor, is a question which occurs only to armchair philosophers. This would be in all respects like the question as to which does more of the cutting, the upper or the lower blade of the scissors.

Shares generally divided into wages, rent, interest, and profit. It simplifies the problem somewhat to classify those who take part in the contemporaneous division of labor according to the functions which they are supposed to perform. It is customary to divide them into four main classes. The first class is made up of the laborers, who work either with their hands or with their heads and receive their share in the form of wages or salaries (for the sake of simplicity salaries are, in this chapter, included under wages); the second class is made up of the landowners, who own the land and receive rent; the third class is made up of the capitalists, who supply the capital and receive a reward in the form of interest; and the fourth class is made up of the independent business men, who undertake to assemble all the other factors,—who take the chief risks of the enterprise and receive whatever is left over after all the others are paid, and call it profits.

We may say in general that when one factor of production is oversupplied in proportion to the others which need to be combined with it, the question of getting more of it, or even of maintaining the existing supply, becomes unimportant. Accordingly not much will be paid in order to get more of it, or even to hold the existing supply. But when any factor is undersupplied in proportion to the others which have to be combined with it, the question of getting more of it, or of holding the existing supply, becomes very important. Accordingly a high price will be offered for it.

This principle applies not simply to land, labor, and capital, but to the different kinds of each. If there is a scarcity of skilled labor in proportion to the unskilled labor which has to be combined with it, it becomes very important to get more skilled labor or at least to keep some of the existing supply from going elsewhere. In that case a high wage will be offered for skilled labor. Under the same conditions there is, of course, a large supply of unskilled labor in proportion to the skilled. It is therefore not very important that there should be more unskilled labor, nor even that the existing supply should be kept from diminishing. Not much is likely to be paid, under such conditions, for unskilled labor.

The next question is, What determines the relative supply of the various factors of production?

EXERCISES

1. What, in the simplest form of statement, determines how much will be paid for a man's labor?

2. If more laborers are needed than are offering to work at existing wages, how can more be secured?

3. Why does anyone desire to hire labor?

4. How may the desire to hire labor be increased?

5. Where two or more kinds of labor have to combine in order to produce something, why does anybody find it necessary to pay higher wages to one kind than to another?

6. Would it be necessary if all kinds of labor were equally abundant?

7. How is it determined what share of the price of bread goes to the farmer, the miller, and the baker?

8. Is this the same question as that of determining what share of the price of wheat goes to the farmer and what share to the farm hand?

9. When labor is scarce and land abundant in a farming community, how would it affect the total crop if a few more good farm hands were to come? How would it affect the crop if a few more acres were opened up to cultivation? Do these questions have anything to do with the wages of labor and the rent of land?

10. What are the principal shares into which the products of industry are divided?

CHAPTER XXXI

WHAT DETERMINES THE RATE OF WAGES?

Causes of differences of wages in different occupations. Let us consider, first, the causes of the difference of wages in different occupations. If in order to get efficient production it is found necessary to have a high degree of specialization, many different kinds of skill will be found in the same establishment, each kind contributing its share toward the production of the same product. Men possessing these different kinds of skill will be needed in slightly variable but fairly definite proportions. In the production of cloth, for example, spinners and weavers will be needed in fairly definite proportions. If by any accident it could happen that for a period of time there were more spinners than were necessary to supply yarn for the weavers, the value or importance of each spinner would be considerably reduced. Under these conditions, if they could exist, it would be literally true that the loss of a few spinners would bring little loss to the industry, provided the remaining spinners could supply all the yarn the weavers could use. On the other hand, the labor of each weaver would be of considerable importance.

Since there would not be weavers enough to use all the yarn that could be produced, one less weaver would reduce the total production of cloth, and one more weaver would add to the total production, assuming that machinery and room were available. Under these conditions there would grow up in any free community a difference in wages in favor of the weavers and against the spinners. This would be called the law of supply and demand, but this law rests on certain fundamental advantages and disadvantages. The addition to the total output of cloth which would result from an increase in the number of weavers would really be

much greater than the addition which would result from an equal increase in the number of spinners. This would be a sufficient reason why a higher price should be offered for the labor of weavers than for that of spinners. In the absence of compulsion that would be the only way of attracting more weavers and fewer spinners.

Of course this condition would soon correct itself. If the wages of the weavers were allowed to go up and the wages of the spinners to go down, some of the spinners would have an excellent reason for changing their occupation. If they could not easily do so the oncoming generation of laborers, who have to choose between the occupation of weaver and that of spinner, would be attracted into the one where the wages were higher, and thus restore the equilibrium. But if wages were not allowed to readjust themselves because of some compulsion on the part of the government or some other agency, then there would be no reason why the oncoming generation should go into the occupation where they were most needed. Where the ordinary processes of bargaining are not interfered with, wages tend to be high in those occupations where more men are needed, and needed badly, and low in those occupations where there is no great need for more men. The function of these differences of wages is to restore the equilibrium between different occupations.

Cost of acquiring skill. If there is some permanent obstacle in the way of a free choice of occupations, there may be a permanent difference in the wages in different occupations, based upon a permanent undersupply of labor in one and a permanent oversupply in another. If, for example, a certain occupation requires a kind of skill which is not widely distributed or easily acquired, whereas another occupation requires a kind of skill which multitudes of people possess or can easily acquire, there is likely to be a permanent undersupply of the one kind of labor and a permanent oversupply, at least relatively, of the other. The cost of training or the difficulty and irksomeness of the necessary study and practice will serve to limit the number of people who succeed in entering the highly skilled occupations.

In this respect the cost of acquiring the necessary skill acts very much as the cost of producing a commodity. As the price of the commodity must be high enough to cover the cost, so the wages of labor in a highly skilled occupation must be high enough to pay the cost of acquiring the skill or to overcome whatever disinclination there may be to the preliminary work of study and practice. If this cost is high the wages must be correspondingly high. If the cost is very low, so that practically no one is deterred from entering the occupation, the wages will be correspondingly low.

Some skill is absolutely limited. There may, however, be certain kinds of skill which are so scarce as to be almost incapable of being increased. Certain kinds of work may require a man of genius rather than a man of training, but in most cases it will be found to be a matter of training. An indefinite number of men could be trained for almost any occupation if the wages were only high enough to furnish a sufficient inducement.

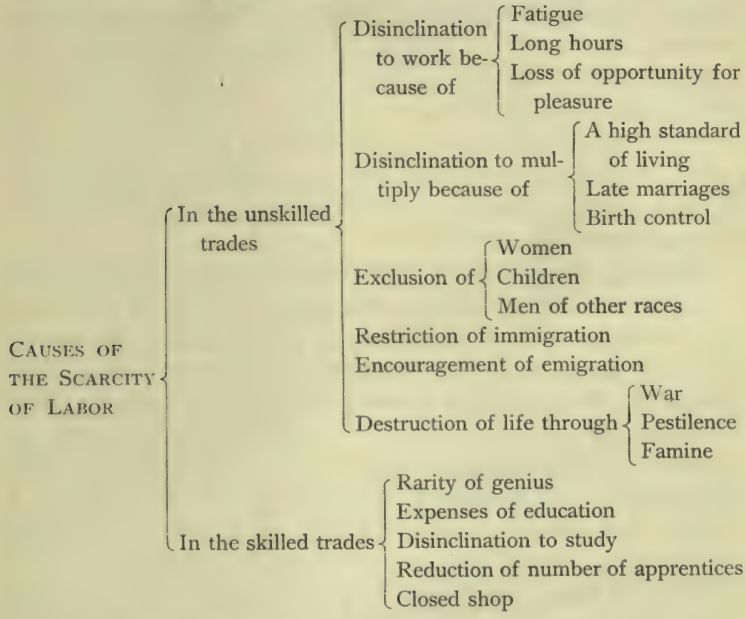
This, however, will depend somewhat upon the opportunities for education and training. Under a system of free public education the cost of training is greatly reduced and should naturally increase the supply of highly trained labor. Where the money cost of education is eliminated, the only cost remaining is the irksomeness of hard study. Those to whom this irksomeness is very slight will naturally be attracted into the more highly paid occupations.

There may, however, be artificial restrictions in the way of entering certain well-paid occupations. If the laborers in one of those occupations where apprenticeship still prevails should limit the number of apprentices, that would of course limit the number of laborers who could acquire skill enough to follow the occupation.

In other cases the policy of the closed shop might be carried to such an extreme as to reduce the supply of labor in the given occupation and thus prevent the readjustment of the labor supply to meet the demand. The tendency of freedom, however, is to encourage the automatic readjustment of the supply of labor to the demand.

These are the principal factors which determine the excess in wages of the skilled trades and occupations and the learned

professions over and above those paid in what are known as the unskilled occupations. By the unskilled occupations are meant, however, those which require a kind of skill which practically everybody can acquire without much special study. We have, therefore, the problem of finding out what determines the wages of this general mass of unskilled labor. What is there here which corresponds to the cost of producing a commodity or to the cost of acquiring the skill required in one of the well-paid occupations? The factors of cost here are, first, the disinclination to work, and, second, the disinclination to multiply.



Scarcity of unskilled labor. Among the vigorous European and American stocks the disinclination to work is not so very great. Nevertheless, there is an appreciable quantity of labor which is chronically withdrawn from productive work by reason of this factor. That part of the leisure class which is made up of people who have inherited, married, or otherwise come into

possession of sufficient wealth to enable them to live without work, shows this disinclination rather clearly. There are also the chronic loafers, the tramps, and the nomadic element among us, who show a strong disinclination to work.

The disinclination to multiply is unfortunately strongest among those who possess the most forethought. Those who live only in the present show no such disinclination. People without forethought marry early and have large families. Those, however, who look to the future, not only of themselves but of their children, who foresee the disadvantages which their children will suffer if they are insufficiently nourished or inadequately educated, generally have small families. Marriages of those who take thought for the future are postponed until they are able to support and educate their children.

The group of motives and factors which serve to hold population in check are generally called by the name "standard of living." This is a somewhat technical term in economics and requires some careful explanation.

Meaning of "standard of living." Technically the term "standard of living" means the number of desires which, in the average person of the class in question, take precedence over that group of desires which result in the multiplication of numbers. For purposes of discussion we will call the latter group of desires the domestic instincts. When the domestic instincts act powerfully and without opposing motives to hold them in check, the individual will undertake the support of a family before he is assured of a sufficient income to satisfy any but the most elementary desires. Under these conditions he is said to have a low standard of living. In other cases a large number of other desires take precedence over the domestic instincts. An individual of whom that can be said will not marry and undertake the support of a family until he feels reasonably certain of being able to satisfy all these other desires. He is said to have a high standard of living; that is, an expensive standard.

If we can imagine a community to which immigrants from the outside do not come, and in which the average unskilled laborer

has a high standard of living, we shall have a community in which the average laborer will not marry and undertake the support of a family until he is sure of wages high enough to satisfy a large number of desires. The rate of multiplication will therefore be slow, the oncoming supply of labor scarce, and in the succeeding generations laborers will thus be able, through the smaller supply, to continue to get high wages.

The law of population. This brings us to the great law of population, which has generally been associated with the name of Malthus. The law which Malthus worked out and which has never been successfully refuted, though many attempts have been made, may be stated briefly as follows:

1. Every species of plant and animal has the physiological power to multiply faster than its means of subsistence will permit. Subsistence is the factor which actually limits numbers.

2. The physiological power of human increase is also so great that if it should operate without moral or social restraints of any kind, it would carry population to such limits that vice or misery or both would begin to thin out the surplus population and thus operate as a check upon further increase.

3. Owing to the law of diminishing returns, a larger number of people cannot, in any given state of civilization and of the industrial arts, be so well provided for from the produce of a restricted area as a smaller number can.

4. The postponement of marriage until a comfortable income is assured tends to keep numbers within such limits as can be comfortably maintained.

Effect of immigration. We began our discussion of the standard of living by assuming a community to which no immigrants came. If unskilled immigrants came in large numbers, it would offset the results of a high standard of living. However high the standard of living of the native laborers, or however strong the tendency of the educational and social system to raise the standard of living, if large numbers of immigrants with a low standard continue to come in, their presence will keep the standard down to a low level. At any rate the oversupply of unskilled

labor will tend to keep wages down. Their coming tends to make business conditions easier for men who need to employ unskilled labor, but to make conditions very much harder for the unskilled laborers who are already here. If, however, the immigrants resemble those Americans who go to the Philippine Islands (that is, if they belong to the skilled, the professional, and the employing classes), they tend to make conditions easier for the unskilled laborers but harder for the skilled, the professional, and the employing classes who are already there.

Summary. The discussion thus far may be summarized as follows:

1. The wages of any person will depend upon how much his labor is desired. The wages of any class will depend upon how important it is thought to be that there should be more laborers of that class, or that there should not be any less. High wages indicate a strong desire and low wages a weak desire to have *more* of a certain kind of work done.

2. Different kinds of labor usually have to be combined in fairly definite but somewhat variable proportions. If there happens to be more of a certain kind than will combine satisfactorily with the existing supply of the other necessary kinds, the oversupplied kind will not be strongly desired. There will be no great need for more of it, and therefore no strong reason for paying high wages. The kind of labor, however, which is undersupplied will be much more needed. There will be a strong reason for desiring more of it, and the only way, in a free society, to get more of it is to offer high wages.

3. Labor which requires a kind of skill that is difficult to acquire will usually be scarce, relatively to the need for it. Wages must be high enough to induce men to make the necessary effort in order to fit themselves for the work.

4. Unskilled labor is usually abundant, being limited only by the disinclination to work, by the standard of living, or by the cost of bringing up children. Where the cost is high, or the unwillingness great, wages must be high enough to induce men to marry and bring up children. When the cost is low and there

is very little unwillingness to overcome, wages may be low because men will bring up children on very low wages and thus keep the supply of labor intact.

EXERCISES

1. Why are there differences of wages in different occupations?

2. Would there be any considerable differences if every man were equally well fitted for every occupation?

3. Would there be any considerable differences if every kind of skill could be acquired with equal cost?

4. Do you consider that the necessity for hard study is a kind of cost? Would it be if everybody liked hard study?

5. What are the chief causes of the scarcity of unskilled labor?

6. What are the chief causes of the scarcity of skilled labor?

7. What is meant by the standard of living?

8. What limits the number of pine trees that can grow? Is it the number of seeds, or the means on which pine trees subsist?

9. What effect has immigration on the wages of unskilled labor (1) when the immigrants are mainly unskilled laborers? (2) when the immigrants are mainly employers?

CHAPTER XXXII

THE ORGANIZATION OF LABORERS

Comparative advantages in bargaining. It has long been recognized that in the ordinary bargaining process between laborers and their employers, the laborers are usually at a disadvantage. The reasons why they are at a disadvantage have been variously stated. It is argued, for example, that the capitalist can wait longer than the laboring man, and thus wear the laboring man out and force him to give in and accept the capitalist's terms. The capitalist, it is said, having an accumulation of wealth, can live on that accumulation.

There is doubtless something in this argument, though it is easy to exaggerate it. If the capitalist's accumulation is in the form of buildings and machinery, it is difficult to see how he can live on these things. He might borrow money on the basis of the security which they furnish, and with this borrowed money buy consumers' goods. But if he owned his own house, if he had insurance policies, or deposits in the savings bank, he would have the same or even greater waiting power than he has when he owns capital of equal commercial value.

It is therefore frequently argued that one remedy for this situation is for the laborer himself, as far as possible, to acquire his own home, life-insurance policies, and deposits in savings banks. This would help, at any rate, to give him the power to wait, and would thus help to even up the advantages in bargaining. The objection to this is the simple observed fact that the laborers have less property of any kind than their employers; otherwise they would not be laborers. This being the fact, it does not help much to point out what the laborer might do if the facts were otherwise.

Another reason given for the disadvantage of the laborer in the bargaining process is that he is usually less skillful in the matter

of bargaining than his employer. His expertness is more likely to consist of manual skill than of skill in bargaining. The independent business man is peculiarly a bargaining person. He literally bargains for everything. If he borrows capital, if he rents land, if he buys raw materials, secures transportation rates, and hires labor, and also organizes a selling department,—every part of his work has to do with bargaining. He becomes, therefore, the bargainer par excellence. Those whose expertness lies in other directions are therefore at a disadvantage when they come to deal with him. This argument is undoubtedly correct as far as it goes.

Employers are few, but laborers are many. The third fact, however, which usually works to the disadvantage of the laborer and the advantage of the employer is that laborers are usually numerous and employers few. There is usually more competition among laborers for jobs than among employers for men. Wherever this fact does not exist, there is no great advantage on the part of the employer.

In view of this fact, therefore, the fundamental and permanent remedy for the laborer's disadvantage in bargaining must be such a reduction of the number of laborers and such an increase of the number of employers as to give the laborer at least an equal advantage in the bargaining process. Anyone who can become an employer instead of an employee can thereby increase the demand for labor and reduce the supply.

Collective bargaining. That which is known as collective bargaining, as distinct from individual bargaining, is supposed to be a quick remedy for the immediate ills of the laboring man. In a trade where laborers are oversupplied, each individual laborer is in a weak position, because he can easily be spared. Because there is a superfluity of labor his place can easily be filled. Under such conditions his individual bargaining power is very weak; he is practically compelled to take whatever terms are offered to him. His kind of labor as a whole, however, may be absolutely indispensable. While he as an individual could be spared without much inconvenience, the whole body of laborers in his trade are absolutely indispensable when considered as a whole. If they

were all to stop work, business would have to stop; if they were all to emigrate, the whole business in which they were engaged would be destroyed.

The group may be indispensable, while the individual could easily be spared. The fundamental principle involved in the trade-union policy of the present is the substitution of the indispensable group for the superfluous individual as a bargaining unit. Since the group as a whole is indispensable to industry, if they can bargain as a whole the laborers are in a strong position. As a group they cannot be spared. The difficulty, however, has always been to hold the group together and get them to bargain absolutely as an indispensable group and to refrain from making individual bargains independently of group action.

The trade union. This underlying principle has given rise to one of the largest social movements of modern times; namely, the organization of laborers. Several types of organization, however, have entered the field, and there is still some rivalry among them. In the first place, there is the trade union pure and simple; this is an organization of the men who ply the same trade; that is, the men whose work is of the same kind. The Brotherhood of Locomotive Engineers is an example of this kind of organization.

The industrial union. In the second place, there is the industrial union, which includes all the laborers plying various trades who are engaged in the same general line of industry. The United Mine Workers of America is one example of this type of organization; the Brotherhood of Railroad Trainmen of America, which attempts to take in all the railroad workers, is another.

The labor union. A third type of organization is what may be called the labor union, which attempts to organize all laborers, of whatever trade or occupation and in whatever industry they may be engaged. The Knights of Labor had an organization of this type, and lately the Industrial Workers of the World have attempted a similar type of organization.

The federation of trade unions. The trade union seems in recent years to have been somewhat stronger than either the industrial union or the labor union, but it has felt the need of some

larger and more nearly universal type of organization. This has been secured by the federation of trade unions into a national organization known as the American Federation of Labor. This type of organization recognizes that each trade has certain special and peculiar interests of its own and therefore has a special reason for organizing as a trade. This is a principle which seems to be ignored by the labor union especially. By organizing the special and peculiar interests of each trade the federation becomes stronger at this most vital point. By federating the different trades for the furthering of the interests which are common to all, it becomes stronger at another important point; namely, concerted action on a nation-wide scale.

The attempt to ignore the special interests of each trade and to unite all workers, of whatever trade or industry, into one universal, undifferentiated organization, has had certain idealistic features which make a strong appeal to men of idealistic temperament. There is the attempt to ignore any possible rivalry of interests among different classes of laboring men. While this sounds attractive, it hardly accords with the observed facts. It is perhaps a little more humanitarian in its philosophy, but a little less effective in its methods of work. It might be compared to an attempt to create a unified nation by ignoring all local interests and internal conflicts, whereas the federation idea might be compared to a system of government which would recognize local and state interests and allow a certain amount of self-government to the local units, but which would unite them all under a national government for the carrying out of national aims.

Necessity of controlling the supply of labor in its own market. Like all attempts in all fields to bargain to better advantage for the sale of either a commodity or a service, an organization of laborers must get control of the supply of the service which it is trying to sell. This leads to the policy of the closed shop; that is, the policy under which none but members of the organization are to be employed in a given shop or series of shops.

If any considerable number of outsiders are permitted to work in these shops, they will of course bargain independently and be

in a weak position. That very fact also tends to weaken the power of the organization in the bargaining process. Unless the organization can control the supply of labor which is permitted to work in a given trade,—can withdraw them as a body or put them back as a body,—it will find itself unable to secure advantageous terms.

The closed shop. An absolutely closed shop is very difficult to maintain when there is a surplus of laborers available for a given occupation. So long, for example, as indefinite numbers of foreign-born laborers can be had for the recruiting of the ranks of any trade, nothing but the most drastic measures on the part of the organization of laborers can preserve its control.

The strike. The strike has become one of the drastic methods through which an organization of laborers may enforce its control over the labor supply. Theoretically the strike is merely the suspension of work by the laborers of a given trade or group of trades. If there were no waiting list and no available mass of laborers from which to fill the shops which they have vacated, a mere quiet suspension of work would be all that would be involved in a strike. This, however, is seldom the situation. There is generally such an oversupply of labor, especially of the unskilled kinds, as to force the strikers to do something else besides the mere suspension of work. They must manage somehow to keep others from taking their places. This may take the form of peaceful picketing and persuasion; it may take the form of threats; and, in extreme cases, it may even take the form of violence and terrorism.

It is to be remembered, however, that threats, violence, and terrorism are only necessary, even from the laborer's point of view, when there is an oversupply of labor available for the jobs of the strikers. The ultimate cure for this situation is that which was suggested earlier in this chapter,—such a thinning out of the number of laborers, especially in the unskilled occupations, as to reduce the number of men to an approximate equality with the number of jobs.

Numbers make for weakness in bargaining but for strength in fighting and voting. One large fact which complicates the

whole problem of the organization of laborers and their methods is that those who, because of their numbers, are weak in the bargaining process become, by virtue of those same numbers, strong in the making of public opinion and in the election of candidates for office. Roughly speaking, one may say that the more people there are in a given trade, the weaker they are in the process of individual bargaining but the stronger they are in making public opinion and controlling elections.

When a numerous class realizes that its numbers count against it in bargaining, but for it in fighting and voting, it is pretty certain, sooner or later, to try to win back, by fighting or by voting, what it has lost in bargaining. Therefore there are two very good reasons why we should try to maintain a balanced population.

By a well-balanced population is meant a population in which, among other things, each occupational group is no more numerous than is necessary to combine with other occupational groups. If, for example, there are no more spinners than are needed to supply yarn for the weavers, no more of both than are required to combine satisfactorily with other groups, no more unskilled laborers than are necessary to work in combination with the skilled laborers, no more of both than are necessary to work in combination with salesmen, accountants, managers, etc., the population is well-balanced so far as these groups are concerned. When this is the case, no group will be at a disadvantage in the bargaining process. That is one reason. The other is that no group would have the motive or the power to win back, by fighting or by voting, what it was losing by bargaining. Such a balancing of our population would eliminate the more acute phases of our labor problem.

EXERCISES

1. Have unskilled laborers or their employers generally had the advantage in the bargaining process? Why?

2. Is the laborer at a disadvantage when labor is scarce and hard to find?

3. Has the indispensable man usually much difficulty in getting good wages?

4. How about the superfluous man?

5. What are some of the methods by which laborers increase their bargaining power?

6. What is meant by collective bargaining?

7. What is meant by the trade union? by the industrial union? by the labor union?

8. How would you describe the American Federation of Labor?

9. What is meant by the closed shop?

10. What is a strike?

11. Does an increase in the number of laborers strengthen or weaken their bargaining power? How does it affect their voting and their fighting power?

12. How would a decrease in the number of laborers affect their bargaining power? How would it affect their voting or their fighting power?

CHAPTER XXXIII

THE RENT OF LAND

Rent the price paid for the use of land. The *rent* of land originally meant the price paid for its use during a given period of time. Its meaning is now extended to cover the income which the owner derives from it, whether he uses it himself or lets it out to someone else. The *selling price* of land is the price paid as a lump sum for its permanent possession, which includes its use through all future time. There is thus a very close connection between the value, or price, of land, on the one hand, and its rent, on the other. The rent is the value, or the price, of the flow of utilities which it yields during a given period of time, such as a month or a year. Both the value and the rent of land come under the general law of value.

Why rent is paid. The utility of land is of various kinds and degrees. In some cases land yields its utilities directly, and thus is a consumers' good or at least resembles consumers' goods in this respect. Parks, pleasure grounds, and residence sites yield their utilities in this way instead of yielding tangible products. In other cases land yields its utilities indirectly; that is, it produces or helps to produce tangible products which are themselves useful.

There are great differences in the utility or desirability of different pieces of land, whether they are used for one purpose or for another. In the chapter on land it was pointed out that these differences are mainly in location and fertility. The other qualities which make land usable, such as extension and solidity, all land possesses in equal degree, so that these qualities do not make one piece more desirable than another; but in the qualities of location and fertility there are great differences, and these differences powerfully affect its desirability and its value.

Differences in the desirability of land. The problem of rent may be approached in several ways. In the first place, we may concentrate our attention on the differences in rent or the differences in the desirability of different pieces of land. There is always land somewhere the use of which can be had free of charge. Nevertheless, men will be found paying high rents for other land which is more desirable than that which can be had for nothing. The fact that it is more desirable than the free land is what makes it command a rent. In the case of land which is useful for production only, its desirability is of course determined by its productivity. He who secures the use of a superior piece of land can either produce more at the same cost than would be possible on the kind of land which is free or he can produce the same amount at lower cost. This difference in productivity gives its owner a rent when he cultivates or uses it himself and enables a tenant to pay rent in case the land is worked by a tenant.

Location as an element in desirability. That the location of a piece of land will affect its productivity will be clear to anyone who will consider that the cost of transporting goods to market is a part of the cost of production. If one farm is so badly located with respect to railroads and markets that it costs ten cents a bushel to haul the wheat to the nearest railroad, while another farm is so well located that the hauling costs only two cents a bushel, it is evident that if the two farms are equally fertile the former will be worth considerably less than the latter.

If land were so abundant that the badly situated farm in the above illustration and other land equally desirable could be had rent free, and if it were the most desirable land which could be had free, then land of this type might be called marginal land, or land on the margin of cultivation. By "marginal land" is meant land which, under the conditions of the market, men would be induced to cultivate if it cost them nothing, but which they would abandon and leave unused if they were required to pay even the lowest conceivable rent for its use.

The margin of cultivation. Aside from the productivity of the land, two other factors help to determine the margin of

cultivation. These are the demand for products and the demand for labor, or the opportunities for the employment of labor. An increase in the demand for products will generally bring land into cultivation which would otherwise have remained idle, whereas a decrease in the demand for products will cause some poor land to be abandoned which would otherwise have remained in use. The margin of cultivation may change, however, for other reasons. When the prairies of the West were brought into cultivation the margin was extended in that direction, but this threw so many products on the market that some of the less productive lands of New England could no longer be advantageously cultivated. Much of this land was abandoned, and the margin of cultivation was contracted in this section. The extension of the margin on the western frontier and its contraction on the rocky hillsides of New England tended to counteract one another. There was, however, at the same time a growing demand for products, so that the expansion in one direction more than made up for the contraction in the other. In other words, the total production actually increased, despite the diminution on some of the New England farms.

Factors which extend the margin of cultivation. An increase in the supply of labor which is seeking employment, unless counteracted by a corresponding increase in the demand for it elsewhere, will generally extend the margin of cultivation and cause land to be cultivated which would otherwise have remained idle. This problem may be approached from two points of view. In the first place, idle land may be regarded as an opportunity for idle men. When the supply of labor increases faster than the demand for it, the number of idle men increases. Some of these idle men are then crowded out onto the idle land. Even if they are not actually thrown out of work, the results are much the same. There is always a current of migration from the farms to the towns. When the labor market in the towns is overcrowded, country boys find fewer inducements to leave the country. Therefore they must perforce remain on the farms and cultivate the land. When larger inducements are offered in the towns, more of them leave the farms and less land can then be cultivated.

Another way of approaching this problem is by considering the wages of farm labor. When farm labor can be had at a low cost, some land can be cultivated profitably which could not be if the same kind of labor cost more. Wherever farm labor is cheap we actually find that there is little land going to waste except the very poorest. Where farm labor is expensive and hard to find we actually find fairly good land going to waste. Only the best land can be profitably cultivated by expensive labor. It must be remembered, however, that labor is not necessarily expensive merely because wages are high. Very efficient labor may be cheap even though it is paid high wages, and very inefficient labor may be expensive even though it works for low wages. With this explanation it ought to be clear that, with a given demand for farm products, poorer land can be cultivated if labor is abundant and cheap than would be profitable if it were scarce and dear.

Different grades of land. A partial illustration of the doctrine of rent can be found in a study of the following table and the explanation which follows it. It is only a partial explanation, however, because it omits the law of diminishing returns. This lack will be corrected in a later explanation.

Grade A, yielding 1000 units of product to 100 units of labor.
Grade B, yielding 900 units of product to 100 units of labor.
Grade C, yielding 800 units of product to 100 units of labor.
Grade D, yielding 700 units of product to 100 units of labor.
Grade E, yielding 600 units of product to 100 units of labor.

Let us assume a miniature community possessing five grades of land, as indicated in the above table. On the best grade of land, which is of limited extent, 100 units of labor will produce 1000 units of product; on the next grade, 900 units of product; on the next, 800 units of product; etc. If the demand of the community were for only 1000 units of product and there were only 100 units of labor, only the best grade of land could be used. Until it was all in use there would be no rent. But if the population were to increase so that there was an increase in the demand for products and also in the supply of labor, Grade A would not

continue to be sufficient. If, for example, the demand were to increase so that 1500 units of product were needed, some of it would have to be produced on the second grade of land, which would thus be the marginal land. On this marginal grade, however, each unit of labor would produce only nine units of product, whereas on the best grade it would produce ten units. Clearly each producer would rather work on Grade A than on Grade B. Because of this preference he can be persuaded to pay something for the privilege of working on Grade A. Approximately one unit of product for each unit of labor would be paid for the privilege of farming on Grade A. An owner of a portion of Grade A who works it himself is better off than an owner of a portion of Grade B. This excess of his income over that of an equally good worker on Grade B is rent just as truly as though he received it in cash from a tenant.

If the demand for products continues to increase until it requires 2500 units of product, some of Grade C will have to be brought into use. This would now be the marginal grade. On Grade C, however, each unit of labor produces only eight units of product. Rather than work on this land, producers would be willing to pay something for the privilege of working on either Grade A or Grade B. Each unit of labor would be willing to pay approximately two units of product for the privilege of working a portion of Grade A, or one unit for the privilege of working a portion of Grade B, rather than be forced to cultivate land of Grade C. In either case it would have as much left as it would have if it got the whole of the product on Grade C without any deduction for rent. If we go on assuming an increase in the demands for products and in the number of units of labor available for the cultivation of land, we shall find each of the Grades D and E in succession brought into cultivation, and the rent going up correspondingly on every grade except the marginal one.

Relation of diminishing returns to rent. This explanation, however, is incomplete, as any explanation of rent is incomplete unless it takes into account the law of diminishing returns.

Even on the best land—in fact, on any grade of land—different applications of labor and capital produce different results. After a certain quantity of labor and capital have been applied to the cultivation of a given piece of land, further increase in the labor and capital does not yield proportionately increased returns.[1] If this were not true, it would never be necessary to cultivate any but the best grade of land. If, for example, 200 units of labor on Grade A of the land described in the table on page 286 would produce 2000 units of product, that would be better than to spread it over both Grades A and B, where it would produce only 1900 units of product. Again, if 300 units of labor would produce 3000 units of product, and 400 units of labor 4000 units of product, and so on indefinitely, we should have what are called constant returns as opposed to diminishing returns. If constant returns could be secured indefinitely, as stated above, it would never be advisable to cultivate any land but Grade A of our illustration.

But the simple and well-known fact is that increasing applications of labor and capital to the same land do not yield constant returns, much less increasing returns. Instead of 200 units of labor yielding 2000 units of product on Grade A, and 300 units of labor yielding 3000 units of product, it is more likely that 200 units of labor would yield 1800 units of product, and 300 units of labor 2400 units of product, or some such quantity. If that were the case, it would be better to take Grades B and C into cultivation than to put all the increasing labor supply onto Grade A. Unless something like this rate of diminution in the returns should result, the inferior grades would never come into use at all.

The law of rent. The rent of a piece of land, therefore, is determined by the difference between what can normally be produced upon it and what an equal amount of labor and capital can produce in less advantageous positions still open to them. These less advantageous positions may be found either by going onto the inferior lands still uncultivated or by crowding onto land already cultivated.

[1] As shown in Chapter XXX, on the Law of Variable Proportions.

EXERCISES

1. What is meant by the rent of land? How does it differ from the selling price?

2. Why is rent paid?

3. Would there be any rent if all land were equally desirable and of unlimited extent?

4. If land were of unlimited extent, but some tracts were more desirable than other tracts, would there be rent?

5. How much rent, under these conditions, would anyone pay for a good tract?

6. What are the conditions which make one tract of land more desirable than another of the same size?

7. What is meant by the margin of cultivation?

8. What are some of the things which would cause the margin of cultivation to be extended?

9. If the best grade of land yielded constant or increasing returns, instead of diminishing returns, would there ever be any occasion for cultivating an inferior grade of land?

CHAPTER XXXIV

INTEREST AND THE DEMAND FOR CAPITAL

What is interest? One of the most difficult and elusive of all problems in economics is that of the interest of capital. Interest may be defined as the income which goes to the owner of capital, whether he uses it in his own business or lends it to somebody else. This income may take any one of several forms. The most common and clearly understood form is where a definite sum of value, represented usually by money, is lent by the owner to someone else. The borrower, in return for the loan, eventually pays back not only the principal but a stated sum or percentage of the principal year by year. But the purpose of the borrower was not ultimately to secure money. Money is to him only a means of purchasing something which he really wants, and if he can make the purchases without actually handling the money his purpose is answered just as well.

In other cases the capitalist may transfer to the borrower, not purchasing power, but the material goods which the lender desires and which he would buy if he were given the purchasing power; meanwhile a definite sum is to be paid at stated periods for their use.

This sum is frequently called rent rather than interest, and there are some reasons for this custom. In the first place, the sum which is paid in the form of money for the use of a group of material objects cannot be reduced to a percentage basis until those objects are evaluated and their quantities stated in terms of value. If, however, the buildings are appraised and their value stated, then it is possible to reduce the annual payment for their use to a percentage basis. Unless the transaction takes this form, it is more convenient to say that the borrower is paying rent than to say that he is paying interest. The chief reason for calling it

interest is that economists have formed the habit of speaking of rent as that which is paid for the use of land, and of interest as that which is paid for the use of capital.

Distinction between interest and profits. In still other cases the income of the capitalist may be secured from the use of capital in his own business. This, however, is sometimes difficult to distinguish from profits. Economists generally distinguish between interest and profits in this way: the business man who has his own capital invested in his business is allowed the current rate of interest on that investment; if he labors or puts in his time supervising the business, he is also allowed a salary or wages of superintendence; if he has anything left over after allowing himself interest and wages, this surplus is called profit or profits.

If he has not been particularly successful the profits may be negative; in other words, he may incur a loss. That means that his total income may not be as great as it would have been if he had gone out of business, lent his capital at interest, and hired out at a salary as a superintendent.

Interest, therefore, as it is generally defined, includes (1) that which the owner receives for the use of a fund of purchasing power which he transfers to a borrower; (2) that which he receives for the use of material goods, buildings, tools, equipments, etc., which he permits the borrower to use for a stated period; and (3) that which he receives in return for the capital which he owns and which he uses, or has invested, in his own business.

Why is interest paid? The problem of interest, thus defined, divides itself into two parts: first, Why is interest paid? second, What determines the rate of interest? One answer to the first question is that capital is productive. This could apply only to what we have defined as productive as opposed to acquisitive capital.

If tools are useful it is proper to ask, For what are they useful? They are useful for production, not for consumption. With an adequate equipment of tools one can produce more than with an inadequate equipment. The formula "More and better tools, more production; fewer tools or poorer tools, less production"

supplies the farmer and the business man with a good reason for wanting more tools and being willing to pay for them.

In any given situation, with any given type of equipment, find out how much you can produce without any particular unit, and then how much you can produce with it, and you have a measure of the productivity of that unit in that situation. At any rate, it is a fair test as to how much that unit would be worth when added to the rest of the equipment. Apply this test to each and every kind of capital required, not only on farms but in shops and factories, railroads, stores, etc., and we get an idea of the test of the usefulness, or productivity, of capital.

Here we must repeat a caution which was given in the discussion of value. We are not to discuss the productiveness of labor in general or of capital in general, any more than we are to discuss, under the problem of value, the utility of bread in general, meat in general, or water in general. We are always concerned with definite units which may be added to or subtracted from the existing supply. Wherever any producer finds that he could use more capital of any form advantageously, he has a perfectly good reason for trying to get an additional unit of that particular kind of capital. Whether we call it the productivity of the unit of capital or merely its usefulness does not matter.

The opposite method of reasoning is involved in the statement that if there were no labor, capital could not produce anything. This is dealing with labor in general and capital in general. It is likewise true, of course, that if there were not any capital, labor would not be able to produce very much during the next month or the next year,—not, in fact, until it had equipped itself with a new supply of tools.

When we speak of the productivity of capital we do not mean that capital is productive under all possible circumstances, regardless of the surroundings. Neither is labor productive in that sense; it has to be located where there is at least land available, and in order that it may be very productive it must have an adequate supply of tools. In short, nothing is productive when it stands alone, unrelated to many other things in the surrounding universe.

Labor, of course, is a more fundamental and primary agent of production than capital, since capital is itself the result of labor, thrift, and enterprise. But we are not, in a practical work on economics, dealing with an absolutely primitive economic situation; we are dealing rather with the conditions which we find all around us, and with the specific needs of specific industries and specific communities.

What does capital include? As capital was defined in the chapter devoted to that subject, it includes something more than producers' goods. It includes consumers' goods which are lent, rented, or hired in order to secure income for their owner. In these cases the income of the capitalist is not due to the productivity of the consumers' goods thus lent; it is due rather to their usefulness in consumption. He who builds a dwelling house, or hires someone else to build it, and then rents it to an occupant is virtually selling the flow of utilities which the house furnishes to the occupant during a definite period of time. These utilities are in the form of comfort, convenience, luxury, and even style in some cases; but the problem of interest is much the same, in the last analysis, whether the capital be productive or acquisitive.

Why capital is wanted. The productivity of capital, or the advantage of having the use of it, is subject to the principle of marginal productivity, as is the productivity of labor and land. If you increase the number of instruments of a given kind in any industrial establishment, leaving everything else in the establishment the same as before, you may, within limits, increase the total product of the establishment somewhat, but you will not increase the product in proportion to the increase in the number of instruments in question. If you increase all the instruments in a given industrial establishment without increasing the labor at the same time, each instrument will be used a little less intensively, or it will be idle a greater number of minutes per day, simply because of the scarcity of labor. On the other hand, of course, if you diminish the number of instruments or the total equipment, leaving the amount of labor the same, each instrument, or each unit of the equipment, will have to be used more intensively.

The productivity of capital decreases, other things being equal, as its quantity increases. Take a farm, for example. With a given labor force, the greater the number and variety of tools and implements, the less intensively each one is likely to be used. On the other hand, the smaller the number, the more intensively each is likely to be used. There are many farms on which it is found that there are such a number and variety of tools and implements that the farmer is really not getting any interest on a large part of his investment. Some expensive tools are idle so much of the year that they do not pay for themselves; that is, the farmer never gets back the original price which he paid, to say nothing about getting interest on that price. On the other hand, there are other farms so poorly equipped that every tool is used very intensively, and it would be money in the farmer's pocket to invest in additional equipment. For every dollar which he puts into more and better tools, he would get back not only the original cost price but something in addition which could be called interest on the investment.

That which is found to happen on farms is found to happen also in larger industrial establishments, factories, railroads, etc. That which is true of an individual farm, shop, or other business establishment is true also of the community as a whole. If, for example, there are very few plows in a given community where there is an abundance of land, many laborers, and much other capital besides plows, each and every plow would be a matter of considerable importance; it would be in general demand and would be used a great number of days in the year. Under these conditions you could say of that community, "One more plow, considerably more product; one less plow, considerably less product"; in short, the marginal productivity, in that particular community, of that form of capital called plows would be high. If, on the other hand, there were a great number and variety of plows in the community, other factors remaining the same, each plow would be a matter of much less importance; each one would be idle a greater number of days in the year. Then you could say, "One more plow, comparatively little more product; one less plow, comparatively little

less product"; in short, the marginal productivity of plows would be low and their value would also be low.

Applying the same method of reasoning to other forms of capital or to all forms of capital, we reach the same conclusions. An abundance of all forms of capital, land and labor remaining the same, would give a low marginal productivity to capital; whereas a scarcity of all forms of capital, land and labor remaining the same, would give a high productivity to all forms of capital. This would show itself in the case of liquid, or uninvested, capital. Where all forms of capital are scarce, one hundred dollars invested in tools would add considerably to the productivity of the community; but where all forms of capital are very abundant, one hundred dollars invested in additional tools would be of comparatively little value.

EXERCISES

1. What is interest?
2. What is the distinction between rent and interest?
3. Is it necessary that interest be paid?
4. If there were no saving, would there be any capital?
5. Do people like to save?
6. If they do not like to save, how can they be induced to do so?
7. What is capital? Why is it needed?
8. Is any more needed than we now have?
9. If the community had all the capital it needed, would there be any such thing as interest?

CHAPTER XXXV

INTEREST AND THE SUPPLY OF CAPITAL

Why capital is scarce. Seeing that the productivity of capital, or its advantageous use, diminishes as the supply of capital increases relatively to other factors, and increases as the supply of capital diminishes relatively to other factors, it is quite important that we should be able to account for the supply of capital as well as for its demand. Its demand, as has already been suggested, is based upon its desirability in production; that is, upon its productivity or the opportunity for its advantageous use. Unless, therefore, the supply were in some way limited, capital might become so abundant as to leave it with no marginal productivity. We found, when we were discussing the value of commodities, that the cost of producing them operated as a check on production and kept the supply within such limits as would give them a price approximately sufficient to pay the cost of production. Some factor must be found which will limit the supply of capital.

Two forms of cost: (1) The original cost of production. There are two factors which are obviously at work. One is the mere cost of producing the capital goods; the other is the cost of waiting, or the disinclination which the average individual feels toward waiting. The cost of producing tools needs very little discussion. Unless the farmer's plow will return him, before it is worn out, enough to replace the price which he originally paid for it, he will of course have no motive for paying that price.

(2) The irksomeness of waiting. Suppose that the plow which cost fifty dollars will return the farmer only five dollars a year and will last ten years; it then just replaces its original cost; the farmer will have got back at the end of ten years the money which he put into it, and no more. Meanwhile he has had to wait ten years. If he did not mind waiting,—if waiting were not in

the slightest degree irksome to him,—he would probably be willing to buy a plow under such circumstances, though there would be neither loss nor gain. If, however, he does not like to wait,—if he prefers present enjoyment to future enjoyment,—then he would hold on to his fifty dollars in the first place rather than spend it for something which would return fifty dollars in ten years' time.

Under these circumstances he will certainly not buy the plow unless he has so few plows as to give a higher marginal productivity than that which we have been discussing. But if he has so few plows that the possession of an additional plow will in the course of ten years add one hundred dollars to his income, he will add fifty dollars to his wealth during the ten-year period,—that is to say, fifty dollars will go to replace the purchase price of the plow; the other fifty dollars is surplus. This and this alone is interest, and a rather high rate of interest; namely, 10 per cent. But if every farmer is likewise disinclined to wait, the market for plows will be limited. Only as many will be purchased as will yield a return large enough to more than pay the purchase price. In other words, farmers in general will get some interest on that which they invest in plows.

Why the present value of a productive agent is less than the future value of all its products. Now, as a matter of fact, people do not like to wait. Waiting is to some quite as irksome as working. It is also quite as necessary to efficient production. Anything, whether it be working, waiting, or risking, which is necessary to efficient production, and which at the same time is irksome, must be paid for. The fact that it is necessary for production furnishes a sufficient motive for paying for it; the fact that it is irksome makes it necessary to pay for it, because men will not otherwise perform this function. In order that there may be an adequate supply of tools, which is necessary for efficient production, there must be waiting. Labor must be performed in the making of the tools, and then somebody must wait until they have been used for a number of years in order to get back from their use the equivalent of that which was originally expended in making them. If the

laborers who make the tools are not themselves willing to wait, they may sell them to someone else, who will then undertake to wait for their products to mature.

Normal price must, in the long run, cover both forms of cost. If both the laborers who make the tools and the one who purchases them are disinclined to wait, the market price of the tools will have to be something less than the sum of their future earnings. The laborers, being disinclined to wait, will be willing to sell for a cash price somewhat lower than the total sum of the future earnings, and the purchaser will not be willing to pay a price which would equal the sum total of the future earnings. In the price-making process, therefore, the capital goods must necessarily sell for less than the sum of the future earnings. The buyer who holds them during their lifetime finds himself in possession of a surplus, which is his compensation for waiting.

Though it is not likely that anyone would be willing to wait ten years to get his money back, he might be willing to wait if he could get back not only the original sum of money but a surplus besides. The farmer, for example, might be willing to pay thirty dollars for a plow which would in the course of ten years earn him fifty dollars. The twenty dollars surplus would be interest. The problem, as it presents itself to the farmer who is contemplating investing money in a plow, is very much the same as the problem which presents itself to a lender who is contemplating lending money to someone else. As a rule he prefers to keep his money rather than lend it, unless he can get a surplus by lending it. Every form of investment involves the same problem.

Not all waiting is irksome. While it is true that, as a general rule, men are disinclined toward waiting (that is, they prefer present to future goods), still there is a certain amount of waiting which takes place normally without any sacrifice. There would be some saving even if no interest could be secured on savings. In fact, it is probable that a considerable amount of saving would take place even if men were compelled to hire vaults or storage places in which to keep their savings. In this case savings could be said to yield negative interest rather than positive interest.

Anyone who is gifted with a moderate degree of foresight will look ahead and consider the possibilities of future emergencies. He may therefore lay up for a rainy day, for sickness, or for old age, even though there is no possibility whatever of securing interest on his savings. Taking the whole community, especially if it contains a great many well-to-do people, a considerable mass of wealth would be saved for this reason alone. This kind of saving may be said, therefore, to involve no cost; and yet those who save in this way are able to secure interest on their savings, along with those who save at considerable sacrifice.

Some capital accumulated without expectation of interest. If those sums which are saved in this way without sacrifice were sufficient to meet the demands of all communities for capital, such a thing as interest would not exist; that is to say, if so much were saved in this way, and there were so few opportunities for using capital as to reduce its marginal productivity to the minimum, capital would practically be a drug on the market. If, however, the opportunities for the productive use of capital are so great that more capital is demanded than can be saved without cost, then, in order to induce further saving, a surplus must be paid for its use.

Interest a part of the general law of value and price. The price which is paid for the use of capital comes under the same law as the price which is paid for anything else. In the chapter on Scarcity it was pointed out that some goods are produced, under certain circumstances, practically without cost. Trout, where the fishing is good, are caught for the pleasure of the sport. If the number of trout that can be caught for pleasure is sufficient to satiate the desire for trout, then trout command no price; if this quantity is not sufficient to satiate the desire, and consumers are demanding more, then they must begin to pay a price to induce other fishermen to undertake the work of providing an adequate supply. The law here is the same as that which controls capital. Some capital will be accumulated without cost. There is probably no community in existence, however, in which enough capital to supply all demands is provided in this way. It is therefore

necessary for all who need it to offer a price in order to induce a larger volume of saving than would take place if no interest were paid; that is, no price for the use of capital.

The cost of saving. The cost of saving is, like other forms of cost, ultimately a matter of psychology. Among people who are gifted with a large degree of forethought, saving is less irksome than it is among people who live mainly in the present. A community with little forethought is therefore always a community in which interest rates are high, because there will be small accumulations of capital and, the supply being small, there is great need for more. It is the need for more of a thing which induces people to pay a price for it.

The functional theory of interest. This theory of interest may be called a functional theory of interest, to correspond with the functional theory of value and the functional theory of wages, which have already been outlined. The function of a high price, as has been pointed out, is to call forth a larger supply; the function of high wages is to induce a larger supply of the labor which receives high wages; and the function of a high rate of interest is to call forth a larger supply of capital for which interest is paid. A community that needs more capital can get it only by inducing larger savings. These larger savings may be secured either by compulsion (that is, by taking a part of the social income by authority and setting it aside) or by attraction (that is, by offering a reward for saving). There is no other possible way that has ever been suggested, even on paper, of accomplishing this result.

EXERCISES

1. Why is capital scarce?
2. If everybody liked to save, would capital be scarce?
3. If everybody had all the capital he needed, would he be willing to pay interest?
4. Why does he not have all he needs?
5. Is it always disagreeable to save?
6. Under what circumstances does it become disagreeable to save?

CHAPTER XXXVI

PROFITS

What are profits? Profits may be broadly defined as the income of the independent business man who receives neither stipulated wages, rent, nor interest. In a somewhat narrower sense they include whatever he has left over after he has allowed himself interest on his own capital, rent for his own land, and wages for his own labor. This would seem to narrow the meaning of profits down to the reward for taking risk, though risk must be defined rather broadly. The enterpriser, as the independent business may with fair accuracy be called, is essentially the man who undertakes something and relieves others of a part at least of the risk which they would otherwise have to take.

It would be quite possible, for example, for a group of laboring men to borrow capital, build their own factory, and run it. But if they did so they would always be in danger of losing not only what they themselves had invested but even their wages for a time; that is to say, if there should come a bad season, when the demand for products fell off, they might have to work for very low wages or for none at all. If some individual or group of individuals will undertake to run the business for them and guarantee them a certain fixed rate of wages, they are relieved of a part of that risk.

Profits as payment for insurance. Again, the men who furnish the capital may jointly assume all the risks of the enterprise. They may, however, be in part relieved by having one individual or group of individuals undertake the business and guarantee them interest on their capital. In such a case, however, the enterprisers usually have to invest some of their own capital, and their own capital is put in the most hazardous position. This is virtually the distinction between common stock and preferred stock in a

corporation. Those who own the common stock take the greater risk. So long as the enterprise is running at all, the owners of the preferred stock must get their interest, whether the owners of the common stock get anything or not; but if the enterprise is very successful, the owners of the common stock get larger returns than the owners of the preferred stock. These larger returns over and above the rate of interest will be called profits.

The lure of an enterprise. In a smaller business, run, let us say, by an individual rather than by a corporation, the individual may borrow a part of his capital, and in this case, so long as he is in business at all, he must pay interest on what he borrows, whether he has anything left for himself or not. In case the business succeeds very well he gets a surplus which may be called profit. The lender of borrowed capital gets no more than the stipulated rate of interest. It is the function of the independent business man or the enterpriser to insure the other participants in the industry against at least a part of their risk. Any income which the insurer gets over and above the normal rate of interest on the capital which he himself puts in may be called profit. This is the lure which induces men to undertake risks of this kind.

This suggests a functional theory of profits which fits in with the functional theories of value, wages, and interest already described in the previous chapters. The function of high profits is to induce a large number of men to undertake independent enterprises. Where a larger number of such enterprises are needed, there are only two ways of getting them started. One is for the community as a whole to take a part of the social income and by authority invest it in new enterprises; the other is to offer a special inducement to private individuals to undertake the new enterprises voluntarily. This is usually done by the offer, on the open market, of high prices for the products of the enterprise.

Necessity of taking risk. Risk-taking is no more meritorious in itself than is waiting or working. It is meritorious only when it results in increased production and well-being. Still, the well-being of society or the increased production of the goods which society needs makes it absolutely necessary that some risks should

be taken. Risk is therefore something which cannot be avoided. These risks are of many kinds and degrees. The tastes of the people may change so that the thing which is to be produced may be no longer desired. Some new invention may render obsolete the processes used and the machinery which has been installed. Strikes, insurrections, wars, and unforeseen physical calamities, such as fires, storms, and earthquakes, must also be taking into account. Risk-taking is therefore as necessary as working or waiting in order to get effective production under way.

Irksomeness of risk. Unless, however, risk-taking were in some way irksome or disagreeable it would not deter men from entering business, and there would be nothing here that would have to be paid for. That is to say, if people liked to take risks there would be no hesitancy in entering a risky occupation. It would therefore not be necessary to offer a reward to induce men to enter it. But since risk-taking is irksome or disagreeable, since men would rather not hazard their accumulations and their present income, they must be paid something as a lure, or attraction, to overcome this disinclination. The reason here is precisely the same as the reason for paying wages or interest, or for paying the price of any commodity. The function of price, in a free country, is to overcome the disinclination to work, wait, or take risks.

Relation of the market to the mathematical value of a risk. In the case of an enterprise which does not appeal to the gambling instinct, men are generally so reluctant to invest that the market value of the risk is usually somewhat less than its mathematical value. Men who persist in buying such risks inevitably gain if they continue long enough and if they are not ruined by their early losses. In the class of risks which appeal to the gambling instinct, the more one invests the more certain one is to lose. If one were to buy all the lottery tickets, one would be absolutely certain to lose, because the management sees to it that the price of all the tickets exceeds the value of all the prizes. In the other class of risks—namely, those which do not appeal to the gambling instinct—the market value is less than the mathematical value, as already stated. It follows from this that if you were to buy all

such risks, you would be absolutely certain to gain, for the sum total of the market values is less than the sum total of all the mathematical or economic values. Those who invest in the gamblers' risk as a class lose rather than gain; those who invest in the ordinary business risks as a class gain rather than lose.

The business man the chief bargainer. Every participant in a competitive enterprise is more or less a bargainer, but the independent business man is the chief bargainer of all. When the laboring man has bargained for a rate of wages, the rest of his work consists not in bargaining but in working; and when the capitalist has bargained for a rate of interest, that is the end of his bargaining; so with the landlord. But the independent business man is the bargainer per se; he bargains for everything,—his raw materials, his help, his capital,—and he also bargains with the purchasers of the product. He is the unbought buyer of everything, and the unsold seller of everything connected with the business. It therefore happens that skill in bargaining is one of the greatest elements in his success in securing profits. Bargaining, however, consists, in the first place, in investing, and the investment of capital is a very delicate operation. To invest successfully one must foresee the future needs of the community as expressed in the demands of the market. To err at this point is to fail. This is not only one of the most delicate but one of the most important of all economic occupations. Whether the productive power of the country is conserved or wasted depends upon the wisdom of its investors.

Because of the disinclination of the average man toward taking the ordinary business risk, the competition is somewhat intense for the safe positions of the laborer and the lender of capital. The intensity of this competition tends to keep their shares somewhat lower than they would otherwise be, but this disinclination makes the competition somewhat less intense among the business men who have to assume the chief risks. This, in turn, leaves them with somewhat larger incomes than they would get if the risks were less irksome and the competition more intense. The surplus income which comes to them in this way is called profits.

EXERCISES

1. What are profits?

2. In what sense does the independent business man insure others who participate in production?

3. Is there any reason why men should be paid for taking risk?

4. Suppose there is something that cannot be produced without risk, and also that men do not like to take risks, would it be necessary then to pay for risk-taking?

5. Does it make any difference what kind of risk it is?

6. Are men generally disinclined toward taking a gambling risk?

CHAPTER XXXVII

THE GOVERNMENT'S SHARE

Public revenue. A certain share of the products of the country, sometimes called the national income, must go to the support of government. Literally it goes to pay the salaries of those people who are doing the work of government instead of the direct work of production. The government's share is usually called public revenue.

Classification of revenues. There are various sources of public revenue, but in modern times the chief source is taxation. Henry C. Adams, in his work on Finance,[1] gives the following classification:

- Public Revenue
  - Direct revenue
    - Public domains
    - Public industries
    - Gratuities or gifts, or treasure-trove
    - Confiscations and indemnities
  - Derivative revenue
    - Taxes
    - Fees
    - Assessments
    - Fines and penalties
  - Anticipatory revenue
    - Sale of bonds or other forms of commercial credit
    - Treasury notes

In former times the public domain was made to supply a large part of the revenue for the government. In fact, under the feudal system, property in land and something resembling public office went together. The king had his own demesne; so likewise did his retainers and all members of the nobility. The nobility formed the chief fighting class and were also the administrators of local government, each deriving his income from the lands which were granted to him.

[1] The Science of Finance, p. 227. New York, 1899.

Public industries have not figured very largely as sources of public revenue, unless royalties from mines could be put in this class. A number of European cities have derived portions of their revenue from their own water, gas, and electric-light plants. Gratuities and gifts, as well as treasure-trove, are negligible sources nowadays. Confiscations and indemnities belong to a lower stage of civilization, where militancy and the lust for conquest prevail. In all civilized governments taxes have become the chief source of revenue—fees, assessments, fines, and penalties forming subsidiary sources.

What is a tax? A tax is a compulsory payment to the government for which the government does not return to the individual payer a commodity or a service. The money, for example, which one pays for a postage stamp is not a tax; it is rather a purchase of a service. Where a municipality owns its own water supply and charges water rates, these rates are not in any proper sense taxes; they are, like the purchase of postage stamps, payments for service. The same is true of the price paid for any direct service which the government renders.

To be sure, the government renders general services for all its taxes; but in the case of a tax there is no attempt to apportion the payment exacted of the individual to the benefit which he as an individual receives. Doubtless everyone receives some advantages from the existence of an army or a navy, of courts, or of policemen; but his tax is not of the nature of a purchase, since he must pay the tax whether he thinks he is getting anything in return for it or not, and the amount of the tax bears no relation whatever to what he thinks the value of the service of the state may be to him.

Some taxes are absolutely compulsory; others are compulsory only conditionally. An income tax, an inheritance tax, or a poll tax is absolutely compulsory. The individual has no choice in the matter. An excise or a tariff duty may be avoided by avoiding the use of the articles on which these duties are levied. One may avoid the excise duty on tobacco, for example, by refraining from the use of tobacco. And yet when one pays this tax, he is not receiving from the government a service, since the government did

not produce the tobacco but only charges the manufacturer or the dealer for the privilege of manufacturing and selling.

So-called indirect taxes. The taxes just described are generally called indirect taxes. In case of a tariff duty, for example, the importer of the dutiable article pays the tax directly to the government. From his point of view it is just as direct as any tax. It is the general theory, however, that the consumers of the imported articles pay the tax in the form of higher prices. In cases where that happens the consumers may be said to pay the tax indirectly. This is by no means always the case, however, and it is not always easy to determine who does actually pay the tariff duty. It is therefore doubtful whether or not the term "indirect taxation" should be retained in economics.

All real taxes are direct in the sense that the payers pay their money directly to the government. In some cases, however, the payer is able to shift the tax to somebody else by charging a higher price for a product or by paying a lower price to the one from whom he himself buys the product. The manufacturer of alcoholic liquor pays his excise duty as directly to the government as any other tax, but if he charges the consumer a higher price for the liquor, the consumer is then said to pay the tax indirectly. The manufacturer may also pay the producer of the raw materials a lower price, and in that case it is the producer who pays the tax, in part at least. If the manufacturer carries a part of the burden which he is unable to shift to someone else, he himself bears that burden directly, not indirectly.

Taxes and monopoly price. A common abuse of the word "taxation" is to apply it to monopoly price by saying that the monopoly taxes the people. It is sufficient in a case of this kind to say that the monopoly charges too high a price, or a monopoly price; bringing in the word "tax" does not add anything to the clearness of the discussion. Where the monopoly sells a commodity or a service, even though it sells it above cost, the individual gets what he thinks ought to be the equivalent of what he pays; otherwise he would not purchase the article. Similarly, the government might, if it chose, charge more for postage stamps

than the cost of carrying the parcels. This would not properly be called a tax; the proper expression would be to say that the government is charging a high price.

Compulsion in public business. Even where the government derives a part of its revenue from a public industry, the element of compulsion is generally present. If the revenue from the industry does not pay expenses, the industry cannot become bankrupt and its affairs be wound up by legal proceedings. The government can merely tax the people or derive an enforced revenue from some other source to pay the deficit; that is, it can use its power of compulsion to keep alive an unprofitable industry, whereas an individual or private corporation, lacking the power of compulsion, would have no power to keep its business alive.

Again, it will generally be found that the government exercises some compulsion by excluding competitors from its own particular field. No one is allowed to compete directly with the Federal post office in carrying first-class mail. The government's power of compulsion is exercised in its own behalf. In fact, it is doubtful if there is a case on record where any government has succeeded in doing anything well on a purely voluntary basis. It has had to use its power of compulsion at some point or other in the enterprise. It has either raised funds by compulsion or excluded competitors by compulsion, has repressed opposition and criticism by compulsion, or in some other way made use of this great advantage which it possesses over all private organizations, in order to insure its success. .

These observations are made not for the purpose of criticizing or opposing government enterprise, but merely in the interest of truth and accuracy. Government is compulsion; and when properly exercised, compulsion is beneficent. One of the great and really unsettled questions, however, is as to the limits within which compulsion is beneficent and beyond which it is interference.

Earmarks of a good revenue system. Henry C. Adams gives the following as the marks of a good revenue system: (1) it must be adequate to the just wants of the state; (2) it must present

itself as a system and not as an aggregation of independent and unrelated facts; (3) in a federated government such as we have in the United States the revenue domain of one branch of the government should not encroach upon the revenue domain of another in such a way as to bring confusion; in other words, there must be harmony and balance between the central and local governments, between the local governments themselves, and between the several organizations of local government; (4) it should provide for elasticity of the revenue at the point where elasticity is needed; that is, the revenue must be capable of increase and decrease whenever and wherever it is needed.

Double taxation. The second of these is of particular importance in the United States of America. Paraphrasing the famous rule of the Donnybrook Fair, we have apparently followed the rule, "Wherever you see a thing, tax it." This has led to a great deal of confusion,—to double taxation in some cases and to complete escape from taxation in others. By double taxation is meant taxing an individual or different individuals twice for the same thing. If, for example, a farmer owns a piece of land and also has in his possession a piece of paper called a deed to the land, and if he is taxed once on the land and again on the deed to the land, that is obviously a case of double taxation. If, however, one farmer owns a piece of land and another owns a mortgage on it, the owner of the mortgage is virtually, if not literally, a part owner of the land. If, now, the farmer pays taxes on the full value of the land, and the mortgage owner pays on the full value of the mortgage, there is an equally clear case of double taxation. The double tax really falls on the farmer, because, where mortgages are taxed, the interest rates are made higher in order to recoup the lender for the tax which he has to pay.

During the recent war our Federal government sold large numbers of bonds bearing 3½ per cent interest. One of the arguments used in their favor was that, since they were free from taxation, one received practically as much net income from them as he would receive on taxable property yielding nominally 5 per cent. This shows pretty clearly that taxes affect interest rates.

Where mortgages are not taxed, the same argument would apply and would be effective. If in one state a lender is compelled to pay a 1½ per cent tax on his mortgage, and in another state he does not have to pay any tax, if he is an honest man he would as lief lend at 3½ per cent in the latter state as at 5 per cent in the former. If he is dishonest, however, he may take his chances on avoiding taxation in the former, and if he succeeds he may receive his 5 per cent net.

Again, a corporation may own certain amounts of visible property, while the shareholders have pieces of paper as evidences of their ownership of undivided shares of that property. If the visible property is taxed and the individuals are also taxed on the pieces of paper which they hold as evidences of ownership, the effect is very much the same as though the farmer were taxed on his farm and also on the deed which, like the share in a corporation, is only an evidence of ownership.

Overlapping of tax systems. The third of these marks of a good system is also important in this country. The conflict of jurisdictions between Federal and state governments, and between the state governments themselves, has produced a great deal of confusion and also a great deal of double taxation. Various remedies for this situation have been proposed, among others the subdivision of the various sources of revenue, each grade of government being allowed its own particular source.

The Federal government, for example, is by the Constitution given exclusive right to levy duties on imports. Since no state or municipality is permitted to enter this field, there is no confusion there. It has also been suggested that real-estate taxes should be left exclusively to the local governments,—municipalities, counties, and townships. It is thought by certain writers that licenses and franchises also should be left exclusively to local governments. Incomes and inheritances would seem to be suitable objects for state taxation. Stamp taxes of various sorts apparently must be left to the Federal government.

No very clear dividing line has been generally agreed upon for the separation of Federal from state sources of revenue. Certain

writers of high authority hold that the income tax should belong exclusively to the states and that the Federal government should keep out of this field. Their views, however, have not received general public support. We already have duplication in this field; that is, in most of our states we have income taxes in addition to the Federal income tax.

Inelasticity of inheritance taxes. The inheritance tax is an excellent source of revenue, being very productive; but it should, from the nature of the case, be a permanent tax not often to be changed. In the course of a generation practically every estate will pass by inheritance and be taxed. But in any given year or decade only a certain percentage of them will pass by inheritance and be taxed. If, therefore, the tax is changed frequently, different estates will bear very different burdens. If, during a few years, a very high inheritance tax prevails, the few estates that pass by inheritance during those years will bear a heavy burden; and if, during the next few years, there is a very low tax, the estates which pass by inheritance during those years will bear a very light burden.

Income tax. An income tax, however, may be changed frequently without injustice to individuals. Everyone who receives a taxable income is likely to receive it every year. The tax may be changed every year without showing any discrimination in favor of or against individuals. This would seem to make it necessary that an inheritance tax should be permanent and be the source of a considerable revenue, but that elasticity should be secured from an income tax, which may be changed frequently as occasion demands an increase or decrease of public revenue.

General property tax. The characteristic form of American taxation, however, is what is known as the general-property tax. Nearly every state in the Union has had, either in its constitution or on its statute books, laws requiring the equal taxation of all forms of property. In many cases this has worked to the utter confusion of our financial system. One result is that visible property is taxed and invisible property escapes. The farmer's land and buildings, live stock and machinery, can scarcely be hidden,

and the assessor finds them. Many of the intangible and invisible forms of property, however, are difficult to find and can frequently escape taxation. Strange as it may seem, many rural districts show a larger percentage of personal property and a smaller percentage of real estate than most of our cities, because much of the farmer's personal property (machinery, tools, etc.) is of a kind that cannot well be hidden. No one really believes that farmers own a larger percentage of personal property and a smaller percentage of real estate than city people, and yet the assessors' books sometimes indicate that they do.

Progressive taxation. Various expedients have been adopted to make taxes more just than they are under the crude general-property tax. Among these laws one of the most important is what is known as the graduated, or progressive, tax. This may apply either to general property, to incomes, or to inheritances. The principle of the progressive tax is that the larger the sum to be taxed, the higher the rate of taxation. To begin with, even an exemption operates to a slight extent as a progressive tax. An income tax which exempts, let us say, $2000 from all taxation and taxes only the excess above $2000 is slightly progressive, even though it is nominally proportional. A tax of 1 per cent on the excess over $2000 would work somewhat as follows: On $3000 the tax would be $10, which is one third of 1 per cent on the whole income; on $4000 the tax would be $20, which is one half of 1 per cent on the whole income; on $6000 the tax would be $40, which is two thirds of 1 per cent on the whole income.

A genuinely progressive tax, however, proceeds farther than this. It begins, let us say, with a 1 per cent tax on the excess above $2000, 1 per cent more on the excess above $10,000, and 1 per cent more on the excess above $50,000, and so on. Under this scheme, then, the individual who had an income of $60,000 a year would pay 1 per cent on $58,000 (the excess above $2000), 2 per cent on $50,000 (the excess above $10,000), and 3 per cent on $10,000 (the excess above $50,000), making a total of $1880. Whether the tax be an income tax, an inheritance tax, or a tax on general property, the principle of the graduated tax is the same.

Canons of taxation. Adam Smith, in his "Wealth of Nations," laid down what have since his day been called the canons of taxation. They are as follows:

(1) The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state. . . . (2) The tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person. . . . (3) Every tax ought to be levied at the time, or in the manner in which it is most likely to be convenient for the contributor to pay it. . . . (4) Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state.[1]

The first of these relates to the general question of justice; the others are so obviously practical and expedient that there has never been any serious discussion of them. A great deal of discussion, however, has centered round the first. Just what is meant by "in proportion to their respective abilities" has never been definitely decided. At first thought it sounds as though this meant proportional rather than progressive, or graduated, taxation. If we assume that a man's ability is in exact proportion to his income, then obviously if he pays in proportion to his ability he must pay in proportion to his income. But it is contended that a man's ability to pay increases more than in proportion to his income, and that therefore if he pays in proportion to his ability, he must pay a progressive, or graduated, tax on his income or his property. That there is some justification for this opinion is evidenced by the almost universal practice of exempting a certain minimum. The individual whose income is barely able to support him and his family may be said literally to have no ability to pay taxes, and yet he has an income. If his income is slightly greater than necessary to support himself and his family, then he may be said to have

[1] Adam Smith, The Wealth of Nations, Vol. II, pp. 414, 415, 416.

some ability to pay taxes. This obviously calls for a certain degree of progression in the way of taxation.

Repressive taxation. The tendency is more and more for expert opinion to favor some sort of progressive, or graduated, taxation as more just than proportional taxation. Just how far in this direction we should go is not easy to determine. It is never wise to kill the goose that lays the golden eggs. Neither is it ever wise to tax anyone so heavily as to drive him out of productive business. If taxes are ever made so heavy upon people who are carrying any large undertaking as to discourage accumulation, enterprise, and thrift, the state will be doing itself an injury. Professor E. A. Ross[1] has suggested a new canon of taxation to add to the four which Adam Smith gave us: A tax should be as little repressive as possible.

The sum and substance of all sound taxation is that the taxes should be as little burdensome as possible. The burden of a tax is twofold. There is, in the first place, the disadvantage to the payer of the tax. It is a loss to him to have to give up his revenue. In the second place, there is the discouragement to enterprise which a heavy tax involves. This is particularly disastrous when the government is irregular and whimsical in its taxing moods. When producers never know what to expect from the government and its tax collectors, they have little inducement to enterprise. Under such conditions there will be little wealth produced for the government to tax, and things are likely to go on from bad to worse.

In case there are undesirable businesses which the government does not care to prohibit, or undesirable habits which the government does not care to suppress, the repressive power of taxation may be used. Men may then be made to pay for their folly, or to give up their folly to avoid taxation. In extreme cases complete suppression is doubtless better than mild repression; in milder cases, such as luxurious consumption, ostentatious dressing, etc., the mildly repressive effect of a tax is desirable.

[1] "A New Canon of Taxation" (abstract). *Publications of the American Economics Association* (1893), Vol. VIII, pp. 49–50.

EXERCISES

1. What is meant by the government's share?
2. What are the different kinds of public revenue?
3. What is a tax?
4. What is the difference between direct and indirect taxes?
5. Is monopoly price the same as a tax?
6. What are the marks of a good revenue system?
7. What is meant by double taxation?
8. What is meant by the overlapping of taxation systems?
9. What is an inheritance tax?
10. Ought an inheritance tax to be changed frequently? Why not?
11. What is meant by the general-property tax?
12. What is meant by progressive taxation?
13. What are Adam Smith's canons of taxation?
14. What is meant by repressive taxation?

PART SIX. THE CONSUMPTION OF WEALTH

CHAPTER XXXVIII

MEANING AND IMPORTANCE OF CONSUMPTION

Two meanings of the word "consumption." There have been two meanings given by economists to the term "consumption of wealth." By one group it has been made to include any use of wealth in which it is worn out, used up, or destroyed in the process; by another group it is defined as meaning only such use as gives direct satisfaction to a consumer. Under the first definition coal is consumed when it is burned to make steam for the running of machinery as well as when it is burned to supply warmth for the comfort of the human body. Under the second definition only the latter use of coal would be called consumption.

It is always explained, however, that the term "unproductive consumption" does not mean useless or unnecessary consumption. It means that wealth thus consumed, in contradistinction to that which is productively consumed, is not used up in the process of producing other wealth. It is used rather for the final purpose for which all wealth is commonly supposed to be produced; namely, the direct satisfaction of human desires or needs.

The tendency among recent writers is to use the term "consumption" in the narrower sense. By the consumption of wealth under this definition is meant the culmination of the whole economic process, namely, the satisfaction of human desires.

The purpose of the user is the determining factor. Under modern conditions goods are used either for direct satisfaction or for the getting of an income. If they are being used for the getting of an income, they are not being consumed in the economic sense. The physician's automobile which is used in his profession is being worn out, but it is not being consumed in the economic sense. When the same automobile is used for his own enjoyment or that of his family, it is being consumed.

Importance of consumption. Most textbook writers on economics have regarded the consumption of wealth as a department of the subject coördinate with such departments as production, exchange, and distribution. None of them, however, has given as much space to it as to those other departments. The reason has apparently been the general opinion that consumption is essentially an individual matter, with which the public has had little or no concern. Laws relating to consumption have been called sumptuary laws and have generally been condemned or only half-heartedly approved. There is a growing opinion, however, that consumption is quite as important, from its effect on national prosperity, power, and greatness, as any department of economics. Even the regulation of consumption, as in the case of laws regulating or prohibiting the use of alcoholic beverages, is becoming popular.

The importance of the consumption of wealth is further emphasized by the consideration that as many and as dire calamities have overtaken nations and peoples because of their irrational habits of consumption as because of inefficient systems of production, exchange, or distribution. In fact, consumption reacts powerfully upon all the other departments, particularly upon distribution. The standard of living of the laboring classes, which is a part of consumption, has much the same influence upon the price of their labor as that exercised by the cost of production upon the price of a material commodity. Again, the rate of the accumulation of capital, upon which so many things depend, is largely determined by the habits of consumption. The effect of luxury upon industry and general national strength is one of the largest of all questions. These illustrations are enough to show that the subject of consumption deserves the most careful study and the most serious treatment which economists can give it.

Ratio of consumption to production. In a profound and illuminating article on War and Economics,[1] Dr. E. V. Robinson calls attention to the fact that in any country, when its production exceeds its consumption, the result is economic progress; but when consumption exceeds production the result is economic

[1] *Political Science Quarterly*, Vol. XV (December, 1900), p. 581.

retrogression. When production exceeds consumption, wealth is accumulating and taking on durable forms; when consumption exceeds production, the national wealth shrinks and the nation lives on its accumulated capital and, moreover, allows its accumulated fund of durable wealth to deteriorate.

When production exceeds consumption, moreover, not only are durable forms of wealth conserved and kept in repair; they are continually improved and new forms produced. There is energy to spare from the work of producing ephemeral articles for immediate consumption. Here time is devoted to permanent works and new forms of construction. Durable goods multiply in quantity, capital accumulates, more and better tools and equipment are provided, and productive power accumulates by a kind of geometrical progression.

Whether, in the nation at large, production exceeds consumption or not depends on the general habits of the average person. If the average person demands large quantities of those things which supply physical and temporary satisfaction, such as luxurious food and drink, fashionable clothing, and expensive amusements, there will be a tendency for consumption to exceed production. If, however, the average citizen is satisfied with the kind of food which nourishes, with clothing which affords comfort and convenience, with amusements which are inexpensive and which tend to preserve the health, strength, and agility of both mind and body, there will be a tendency for wealth to accumulate.

Other factors are, however, involved. There might be a population with simple habits such as we have indicated, but with no desire for the durable satisfactions of life and with little energy to be devoted to production. Such a population would necessarily remain in a low state of civilization. It would not provide abundantly either for the temporary or for the permanent means of satisfaction, but would remain in sloth and squalor. But if, in addition to the simple habits of consumption so far as food, clothing, and amusements were concerned, the average person possessed an intense desire for durable goods,—for beautiful buildings, libraries, schools, and other civilizing agencies,—the conditions

would be favorable to the accumulation of wealth and to all forms of economic progress. If, in addition to all these, the average person were energetic and not disinclined toward work,—if he were willing to study hard and work hard, and if his motives were such as to drive his mind and body at high speed,—the conditions would be still more favorable. This combination of favorable conditions would make progress almost inevitable. Nothing except a geological cataclysm or a world war would prevent such a people from advancing in the arts of civilization.

Preference for durable goods. It is to be borne in mind that the motives and desires of people are fundamental to this problem. Any people can have as much progress and as high a state of civilization as they desire, provided they desire them strongly enough and are willing to pay the price. If the people of ancient Athens had preferred to spend their time, their energy, and their money on temporary satisfactions rather than on the architectural adornment of their city, they could have done so. But because they chose rather to spend their money and their energy on durable goods, they left the world richer than they would have done if they had made the ignoble choice.

The same comment may be made upon the people of various medieval cities, who cared so much for their religion that they were willing to spend their money, time, and energy in building cathedrals as monuments to their religious faith. Similarly, any city of today can be as fine and beautiful as it wants to be, provided it is willing to pay the price. If it chooses to follow the example of those cities of the past that became great and left something to show that they once existed,—something to justify that existence,—it will merely be choosing to consume from day to day and from generation to generation less than it produces, in order that a part of the productive energy of each generation may build for the future. That spells progress. If the city chooses otherwise, it will never leave anything to show to future generations that it once existed, much less to justify that existence.

Value of a man. From the standpoint of progress the value of the individual depends on the excess of his production over his

consumption. The following formula will determine with mathematical accuracy how much a person is worth from the standpoint of national prosperity:

$$V = P - C$$

In this formula V stands for value—that is, the value of the man; P stands for his production; C, for his consumption. Thus the formula reads, The value of the man equals his production minus his consumption. In the cases where his consumption exceeds his production his value is negative; he is a drag on progress, and the world will at least save his victuals when he leaves it.

The whole life is the unit. Lest this be too hastily interpreted, it should be pointed out that a human life as a whole, and not a fragment of it, should be regarded as a unit. The consumption of a child exceeds his production, but this does not condemn him. So, likewise, during the declining years of those who reach a good old age, consumption may exceed production, but this does not condemn the life. If the life as a whole produces more than it consumes, it leaves the world richer by that difference.

Again, production should be given a very wide interpretation. One may produce without handling material goods of any kind, but by inspiring the productive virtues in others, by teaching productive skill to other people, by scientific investigation, by transmitting knowledge, and in various other ways. If, after making all allowance for these different forms of productivity, the mature individual in sound health finds that he is producing less than he is consuming, it is time for him to begin to consider his ways and to experience a change of heart. He needs to be converted from a waster into a producer.

Boarders at the national table. Dairymen sometimes use the term "boarder" to describe a cow whose feed and care cost more than her milk is worth. Every wise dairyman tries to get rid of his boarders and keep only those cows whose production exceeds their consumption. It would seem that men ought to be held to at least as high a standard as that to which cows are held. A man who falls below that standard is a drain upon his country.

The class of boarders includes not simply the tramps and beggars but everyone else who is not usefully engaged, even though he or she lives upon his wife's or her husband's fortune or upon inherited wealth. The class includes even others. Even those who are somewhat usefully engaged may be consuming such expensive products and may require so many servants to wait upon them as to use up more man power than they replace by their own work. As a mere exercise of patriotism, therefore, every mature person should ask himself seriously whether the country is the gainer or the loser by reason of his existence, whether the man power required to produce for him and take care of him is greater than the man power which he contributes to the nation's fund.

The conservation of man power. The importance of this consideration is peculiarly clear in time of war and in other great emergencies. The necessity of conserving every ounce of man power is then manifest. We then see clearly that anyone who is not usefully engaged is a menace rather than a help in the struggle. The food alone which such a person consumes is acutely needed, to say nothing of the man power which he requires in other ways.

Even those who are usefully engaged ought to feel that luxurious consumption at such a time is an interference with the welfare of their country. To consume unnecessary luxuries is to require an unnecessary quantity of man power to produce for us. The same need exists in time of peace, though it is not so acute and is not fraught with such tragic results.

EXERCISES

1. What are the two meanings that have been given to the word "consumption" in economics?

2. What happens to national prosperity when consumption exceeds production?

3. How does a preference for transient rather than for durable goods affect the national prosperity?

4. From the standpoint of national prosperity how should you determine the value of a man?

5. How much is a man worth who consumes more than he produces?

CHAPTER XXXIX

RATIONAL CONSUMPTION

Differences between a high and a rational standard of living. Economists have generally classified standards of living on the basis of their cost or expense. A high standard of living has meant merely an expensive standard; a low standard simply a cheap standard. Very little attention has been given to the difference between a rational and an irrational standard. By a rational standard of living is meant one which increases the margin between one's production and one's consumption. In the formula $V=P-C$, as given in the preceding chapter, the most valuable man is one in whom P exceeds C by the greatest margin. The purpose of the present chapter is to contend that the most rational standard of living is one which produces the most valuable man.

This margin of difference between P and C would be increased, of course, either by decreasing C, by increasing P, or by doing both at the same time; that is, if without reducing in any degree a man's efficiency as a producer, he were to reduce his cost of living, he would thereby be adding to his value from the economic standpoint. To that extent he would enable the community to produce more than it consumed. He would thus be a factor in the accumulation of productive power, or of the durable products of civilization. If, however, by reducing his cost of living, he at the same time reduced his productive efficiency in the same proportion, there would, of course, be no gain, and there might be some loss involved. If, on the other hand, by spending more on himself, especially on books and other means of education, on tools, or on more nourishing food, he were able to increase his productive efficiency, his increase in consumption would more than justify itself.

From this point of view the problem for every individual is to adopt that standard of consumption which will leave the largest

margin between production and consumption. From the same point of view it would frequently be necessary that one man should spend more on himself than another would be justified in doing. Take, for example, a great surgeon whose time is exceedingly valuable, not only to himself but to the community he serves. He might very properly keep an automobile, a chauffeur, and other timesaving devices and agencies. He might even keep a valet to look after his clothes. If these forms of expenditure would enable him to give more people the benefit of his skill, it would be to their advantage for him to spend money in these ways. But an inexperienced surgeon, whose time is not valuable to the community,—who, in fact, has time to spare,—could not properly indulge in the same timesaving devices. For any person whose time is not very valuable to the nation to employ a valet or even a chauffeur would be ridiculous waste and ostentation.

Buying trinkets is not good for business. In opposition to this point of view there is a popular theory to the effect that lavish expenditure is somehow good for business. The difficulty with this argument is that it always assumes that if the individual is not consuming lavishly, he must necessarily be hoarding his money.

It is surely as good for business and labor that one should spend money on builders and architects as on milliners and confectioners. He who consumes lavishly spends his money on confectioners, milliners, and other producers of immediate and temporary satisfactions. He who consumes rationally spends as much money as he who consumes lavishly, but spends it on things which build and improve, rather than on things which merely afford temporary gratification. A community of lavish consumers would, of course, give actual employment to those whose work is to amuse and gratify, but little employment to builders and others producing for future generations. The community that spends money in building for future generations will improve from generation to generation; each generation will inherit from the preceding one a larger fund of durable wealth and will add to this and bequeath a still larger fund to successive generations. It will not be many generations before the latter community will outstrip the former, and

the people from the former will be emigrating to find employment and other advantages in the latter.

The miser and the spendthrift. Instead of placing the miser and the spendthrift in opposite categories, we should really put them together. The miser is a lavish consumer in a most important sense. With extreme gratification he counts his hoard. He loves to handle it, to see it glitter, and to hear it jingle. He is in the strictest sense a consumer of gold. If our traditional miser, instead of hoarding his gold in his cellar, were to use it in gilding his house, no one would doubt that he was a spendthrift. The same amount of gold is withdrawn from circulation, and much the same effect on the market is produced in either case.

Both the miser and the spendthrift should be contrasted with the rational buyer, or the investor in durable goods. The true investor buys goods of which he himself will probably never be able to absorb the full utility. He buys goods that will last so long that future generations will get a part of their utility. Those future generations will therefore have a better start than he did. If this is kept up indefinitely, generation after generation, by all members of the community, it will be a very prosperous and progressive community; but if each individual of each generation merely says, "What has posterity ever done for me that I should be called upon to do anything for posterity? Let us eat, drink, and be merry!" that will always be a backward community.

The case of rival communities. It was suggested above that if two communities started side by side with equal natural advantages but with different habits of spending, we might get a test of the comparative merits of those habits. This may be used likewise as a means of testing, in imagination at any rate, the rational quality of a standard of living. That standard of living which would enable a community or nation to make the most rapid and permanent progress would have to be commended. Something depends, however, on our definition of progress. There may be about as many ideals of progress as there are people who have ideals. Without attempting a full and complete definition, it would seem fairly safe to suggest that among other things progress

should include general improvement in comfort, well-being, and satisfaction.

What standard of living, if adopted and followed persistently, generation after generation, would increase the comfort and well-being of the community and develop the power to support increasing numbers of people and support them better, add to the productive power of each generation, and ultimately raise the economic, social, political, and even military strength of the nation to the maximum? Granting that there are other factors in the problem, we still have the right to insist that the standard of living is one important factor. The standard of living which contributes most to progress as we have defined it is therefore to be commended. That standard of living will contribute most in which the net contribution of the average person is the highest; that is, where his production exceeds his consumption by the widest margin.

It must begin to appear that rational consumption is as important a factor in national prosperity as efficient production. In a most important sense useless consumption is a waste of labor, or of productive power, since it requires labor, or productive power, to produce the useless things which we consume. The labor which produces these useless things is wasted as truly as though it were idle, badly directed, or working with crude and unsuitable tools.

Liberal ideas as to what is necessary. It is well, however, to be rather liberal in our ideas as to what is necessary in order to maintain a man's working capacity at its maximum. Considerable recreation and relaxation are always recognized as necessary. The anticipated enjoyment, not only of games and other forms of recreation but of objects of comfort and delight, is a spur to energy. It is not only a spur to energy; it is also a means of creating and preserving a joyful frame of mind, without which sustained effort is impossible, and without which it is frequently asserted that no really fine work of any kind is ever done.

Joy in work. Looking forward to a holiday or a vacation has sustained many a worker through weeks and months of study and

toil. The desire to possess a bicycle or an automobile has galvanized many an otherwise indolent boy into an active worker. The pleasure of giving toys to their children at Christmas time has lightened the toil of many a father and mother through many a hard winter.

Tools as consumers' goods. The world has undoubtedly lost much, in productive efficiency as well as in the joy of living, through its failure to appreciate the possibility of turning tools and other producers' goods into consumers' goods. That one must have good tools in order to do good work has long been recognized, but we have scarcely begun to realize the full meaning of the term "good tools." It is not only necessary that they be capable of doing their purely mechanical work; it is also essential that they please the mind of the worker. They must be pleasing to look upon as well as agreeable to the hand.

The purpose of a tool is to bridge the gap between the worker and the object upon which he is working,—to enable him to transfer to the object the idea which he has in mind. It must therefore fit the mind of the worker as well as his hand and his arm.

The importance of having tools which help to keep the worker in an agreeable frame of mind is not so much in the fact that he can do more or better work in a given minute or a given hour, though there is something in that. The chief importance lies in the fact that he can keep at it for more minutes, more hours, more days, and more years. Some rare geniuses are able to work regularly and all the time, "taking infinite pains" and apparently never tiring. Most of us, however, are desultory creatures who have to coax ourselves to work steadily. It is easier to coax ourselves to work properly if our tools are such as we delight to handle and our workshop is a place where we delight to be.

Pride in work. The spirit which regards work as a more or less repulsive necessity—which tries to cover up in many ways the evidences of work—is probably responsible for a large part of the neglect which we have shown to our working places. Naturally enough a person who regards work merely as a disagreeable necessity—something to be ashamed of and avoided on every

possible pretext—is not likely to spend very much money on the adornment of his tools or the beautification of his working place.

No rural neighborhood, for example, is quite so desolate as that from which people retire as soon as they have accumulated enough to enable them to live in town. Farmers who retire as soon as they can possibly afford to do so are not likely to spend much money in adorning their farmhouses or in making the neighborhood attractive. It is only where you find farmers who are glad that they are farmers—who expect to remain farmers and whose children look forward to the same career—that you find the farms, the homes, and the community adorned and beautified.

If it were not for the fact, referred to above, that town people have inherited certain aristocratic traditions (or else that they try to ape those who have) and are rather anxious to get away from the sources of their incomes, they might find it possible, in some cases at least, to live near their places of business. If they all did so they would spend their money there and would also, if they could afford it, beautify those surroundings as they now beautify the suburban districts where they live.

It is astonishing how much of the fashion of the world is due to the desire to avoid the appearance of having to work, or even to advertise the fact that one does not have to work. In old times certain Chinese magnates used to allow the finger nails to grow to extraordinary lengths as a visible sign that they did not have to work. The binding of the feet of the girls is said to have had the same origin. The train of her gown, which only lately was a fashionable necessity for every lady in Christendom, answered much the same purpose.

The opposite tendency shows itself once in a while, however. A good farmer usually likes to work with a handsome team, well groomed and harnessed. The team is to him both a consumers' good and a producers' good. There is not much doubt that such a farmer works more cheerfully and more steadily and that he finds life more enjoyable than he would if he tried to get along with an ill-matched, poorly harnessed team in which he could take neither pride nor satisfaction.

It is reasonable to suppose that we should all do better and more persistent work and get more enjoyment out of life if we took some pains to make the conditions of our work attractive. If this is so, it is a matter of great economic importance. More attention to this subject will contribute to the prosperity, strength, and greatness of the nation, and even more to the enjoyment of the people. Expenditure for the embellishment of our tools and the adornment of our working places would form a part of a rational system of consumption.

EXERCISES

1. What is meant by a high standard of living?

2. Is it the same as a rational standard?

3. Is it good for business to spend money extravagantly or to buy things of trivial importance?

4. Is there any essential difference between the miser and the spendthrift? If so, what?

5. Does a thrifty community in the long run spend more or less than a thriftless community?

6. What is a necessary of life?

7. It is possible to think of the tools of production as consumers' goods? In what sense could they be so considered?

8. Is it possible to think of work itself as a form of consumption? Is play a form of consumption or a form of production?

CHAPTER XL

LUXURY

Different classes of consumers' goods. Consumers' goods have been divided into four classes, according to the kind of desires which they are designed to satisfy. They are necessaries, comforts, decencies, and luxuries. This, however, is at best only a rough classification. It may seem fairly easy to distinguish between necessaries and comforts, and there are doubtless many cases where goods are easily classified; but there are also many cases where it is difficult to determine whether the good in question is a necessary, a comfort, or even a decency. Another difficulty which tends to obscure the distinction is found in the fact that no one, however poor, confines himself to necessaries. Part of his expenditure will go for comforts, part for decencies, and part even for luxuries. Again, no one, however rich, can avoid the buying of necessaries and comforts.

Necessaries. In a general way we may define necessaries as all goods which are required for the maintenance of physical health and strength, not only of the mature man but also of his family.

Comforts. Of all classes of goods, comforts are the most difficult to define. They include everything which, though not absolutely necessary for health and strength, can yet hardly be dispensed with in any society where life is really worth living. A young and vigorous person might, by running to and from his work in cold weather, dispense with an overcoat. From his point of view an overcoat could hardly be called a necessary, and yet it would be a great comfort. Cushions or upholstered furniture, spring mattresses, etc. can hardly be called absolute necessaries, and yet they would be considered almost indispensable by the average family.

Decencies. The dividing line between comforts and decencies is likewise obscure. By decencies we mean those articles of

consumption which the habits or customs of one's neighborhood or one's class prescribe, and without which the individual or the family would feel that it could scarcely maintain its position of respectability. Anything which an individual member of any class, occupation, or profession would feel ashamed to be without would come under our definition.

Luxuries. Luxuries are articles of consumption which are not required for the physical health and strength of the people for their physical comfort, or by the rules of society, but are wholly matters of individual indulgence. The dividing line, however, between decencies and luxuries is still very obscure. If a person belongs to a small group of spendthrifts, it may be claimed that the rules of his social group compel him to spend money lavishly on things which others would regard as pure luxuries. He may therefore claim that these are only decencies, because they are prescribed by the rules of his group or class.

Instead of accepting the verdict of any special class or set, it would seem better to confine our idea of decencies to those things which are prescribed by the almost universal consensus of opinion of the time and place. Thus, in America, for example, it would almost universally be thought indecent for men and women to appear in public places, even in warm weather, without shoes, though there are certain isolated communities where this rule would not prevail. Before the advent of the waist shirt it was generally regarded as improper for a man to appear at any public place, especially indoors, without a coat. That every woman shall possess certain articles of finery is a rule even among the poorest of people. It will be better, therefore, if we restrict the definition of decencies to those things which society in general prescribes. Things demanded by the fashions of some special clique or coterie would have to be called luxuries.

Stimulating effect of luxury. Economists have been somewhat divided on the question as to whether a luxury is always to be condemned or not. McCulloch[1] states that any gratification, however trivial, is necessary if an individual is stimulated to

[1] J. R. McCulloch, The Principles of Political Economy. Edinburgh, 1825.

work in order to attain it. John Stuart Mill[1] says, "To civilize a savage, he must be inspired with new wants and desires, even if not of a very elevated kind, provided that their gratification can be a motive to steady and regular bodily and mental exertion."

It is a well-known fact that in certain low states of civilization the laborer or the peon is content with so few articles of consumption that he will not work efficiently or steadily. If by working three days in a week he can earn wages enough to support him, in the style to which he is accustomed, for seven days, he will work only three days in the week. It has been generally recognized that the only cure for this difficulty is to raise his standard of living and increase his wants, so that he will have a motive for regular and steady work. Many interesting stories are told of the devices by means of which the laborer is induced to work or by which his wife is induced to demand more wages of him in order that she may provide herself with finery.

We need not go to backward countries, however, to find examples which illustrate precisely the same principle. There are men among us who reduce the number of working hours per day or week for much the same reason. Finding that they can earn enough in four hours to support them for twenty-four, they choose to work only four hours a day; that is, they go to their offices at about ten o'clock in the morning and stay until about two, and spend the rest of the day at the club or the golf course. There are still others who find that they can earn enough in twenty years to support them for the whole of their lives. They therefore retire from business long before their physical and mental capacity has begun to decline, and spend the rest of their time in pleasant pursuits.

Economically speaking, however, all these men, from the peon up, are merely choosing between different kinds of luxury. To the peon, leisure, sport, amusement, and even rest are luxuries in which he delights. If his desire for this sort of luxury is stronger than his desire for other kinds, he will choose this kind. The same is true of the man who cuts down his working day, his working week,

[1] Principles of Political Economy, Bk. I, chap. vii, § 3.

or his working years. To him leisure, sport, and rest are luxuries. If he cares more for these than for such additional luxuries of other kinds as he could secure by working longer, he will, of course, choose these.

Material and immaterial luxuries. It is true that by choosing material luxuries, rather than the immaterial satisfaction of leisure and rest, the quantity of material goods which are produced and put on the market is increased. The statistics of wealth are expanded. The census taker and the tax assessor find more tangible articles of wealth in such a community than they would find in the community which preferred to take its luxury in the form of leisure. It happens that we are members of a strenuous race, to whom leisure does not seem very desirable, of a race which might be malignly characterized as a greedy or a gluttonous race, having powerful desires for material luxuries. It is natural for us to think that we have made much the better choice when we take our luxury in the form of material goods rather than in the form of rest. We are, therefore, much inclined to despise the race which chooses idleness. There is such a thing as a pot calling a kettle black.

A storehouse of labor. There is an argument, however, which goes back at least as far as David Hume, to the effect that luxuries must be regarded as a storehouse of labor which in the exigencies of the state may be turned to the public service. This may mean merely that a community which is expending a large proportion of its energy in the production of luxuries may, in times of great crisis, turn that surplus energy into the work of meeting the crisis. In time of war, for instance, the consumption of luxuries may be cut down, and the productive energy, which had been used in the production of luxuries, may then be used in the prosecution of the war or in the manufacture of munitions and war equipment. This is undoubtedly a sound argument so far as it goes.

In order to put several million men of working age into the army and navy, and more millions into the munition factories and navy yards, and others into the mines to produce the raw materials, and still others onto the farms in order to increase the food

production, it is absolutely certain that labor must be withdrawn from some source. It is fairly obvious that there are only two sources from which it can be drawn. They who are not working may be put to work, and those who are doing unnecessary kinds of work may be put into the necessary industries.

Reducing consumption in times of national crisis. If every luxury-producing industry were closed down, a vast quantity of labor would be released. It would then be available either for military purposes or for the production of the necessaries of life. Our golf courses, baseball fields, and tennis courts could be transformed into farms and gardens. This would add a good many acres to the productive land, and, what is vastly more important, the players as well as the spectators could be used in productive work, greatly to the advantage of the nation.

These changes in habits may profitably go much farther. The people may economize greatly in their consumption. Starch, in the form of grain, potatoes, or coarse vegetables, is our principal food. To this must be added a very moderate amount of protein, fats, and sugar. These, however, may also be made to serve the purpose of making the basic starchy food more palatable. Fruits and the finer vegetables and salads should be made to serve mainly as relishes. Instead, many of us make our meals principally of things which should serve as condiments, relishes, and delicacies, using starchy food only as a means of diluting them.

Rapid recovery after a local disaster. Even in cases of great local disaster, such as a great fire or earthquake, it has been remarked many times that recovery comes with amazing rapidity. In spite of the fact that vast quantities of wealth are destroyed, the city soon recovers and becomes apparently as prosperous as ever. Luxury is supposed by some to have an important bearing on this question. The energy which, before the disaster, was spent in producing luxuries is now available to be spent in rebuilding what was destroyed. In order to do this, however, the people must, for a time at any rate, reduce their consumption of luxuries. The individual whose property has been destroyed is to that extent poorer than he was before. He may borrow capital with

which to rebuild, but until the debt is paid off, his effective income is considerably reduced. He therefore has less money to spend on articles of luxury; he is virtually spending that money on a new building.

The objection may be raised that the luxury which takes the form of leisure would also furnish a fund of energy for the meeting of a great national crisis or repairing a local disaster. Men who have remained idle, enjoying leisure, may now go to work to carry on the war or to rebuild the city which has been partially destroyed. This objection is somewhat weak, however, because, in the first place, habits of sloth and idleness are much more difficult to overcome than habits of lavish consumption. The sheer inertia of the people makes it almost impossible to rouse them to extra exertions in time of crisis, whereas the people who have been exerting themselves strenuously in the production of articles of luxury may, with less difficulty, redirect their strenuous energy. In a sense the productive machinery of the community is already going. It can be kept going and its direction changed more easily than it can be started up.

In the second place, if a community takes its luxury in the form of idleness, it is certain to be ill equipped with the machinery of production as well as with the technical knowledge and skill which are necessary to efficient production. If it lacks machinery and technical knowledge and skill, it will not be able to carry on a modern war successfully or to repair a local disaster; whereas a community that takes its luxury in the form of material goods will have learned, in the process of production, much technical skill and will have accumulated vast funds of machinery and tools. If there is anything that modern warfare has taught, it is the superiority in war of the nation that is thus equipped. The technical skill and the machinery which are accumulated for purposes of production may easily be turned to the purposes of destruction, and in war the community that is best equipped for the work of destruction will win.

Reducing the rate of permanent construction. So far the argument seems conclusive in favor of material luxury as against

immaterial luxury in the form of leisure and idleness. We are far, however, from a complete justification of luxury in the ordinary sense. The community that is in the habit of investing its money for the future rather than of buying objects of immediate gratification will likewise have a fund of surplus energy at its disposal. All the energy which has been devoted to permanent construction for the future good of society may, in time of great national crisis or local disaster, be redirected toward meeting the crisis or repairing the local damage. The kind of skill which is necessary to permanent construction is of quite as high an order as the kind which is necessary to the production of luxurious articles of consumption. All the advantages, in short, which a luxurious community possesses for the meeting of a great crisis are also possessed by the thrifty community which spends a good portion of its income in durable construction and in building for future generations.

In the long run the community that spends a large portion of its energy in permanent construction will have certain advantages over the community that consumes luxuriously. If every farmer, for example, should put back into his farm a part of his annual income, in the way of improvement of the soil, in ditching, draining, fencing, and building, he would be using up surplus energy just as truly as he would be if he spent that amount of money in luxurious consumption. In time of national crisis he can suspend, for the time, further building and improvements on his farm and have energy to spare for the production of more food; or he can dispense with a certain amount of hired help, which will then be available for government purposes. After a few generations the nation whose farmers systematically put back into their farms a part of their incomes will have much better farms and much greater productive power than the community which merely keeps its agricultural wealth intact and spends the surplus in luxurious consumption.

That which applies to farms applies also to factories, shops, and all other productive establishments. The community which is in the habit of adding to its accumulated wealth in each generation by investing a part of its income in tools and instruments for

future production will, after the lapse of a few generations, be vastly stronger than the community which merely keeps its productive power intact and consumes all its income.

The luxurious consumption of material articles is doubtless very much better than the luxurious enjoyment of leisure—that is, it is better to exercise our energy and ingenuity in producing luxuries than to be lazy and idle; but it is still better to exercise that energy and ingenuity in building for future generations, in adding every year to the productive power of the nation or to the resources of civilization. To do these things it will be necessary to add the virtues of thrift and forethought to those of industry and ingenuity. Through the combination of all these virtues we shall do better than through a part of them. He who does less well than he can, does ill. He who consumes useless luxuries when he might invest productively is doing less well than he can.

EXERCISES

1. How should you define luxuries?
2. How should you define necessaries?
3. How should you define comforts?
4. How should you define decencies?
5. What is the distinction between material and immaterial luxuries?
6. In what sense is luxury a storehouse of labor?
7. Why do modern communities recuperate so rapidly after wars and other disasters?
8. Which is better for a nation, to take its luxuries in the form of material goods or in the form of idleness or leisure?
9. Which is a better way of using up surplus energy, in luxury or in durable construction?

CHAPTER XLI

THE CONTROL OF CONSUMPTION

Difficulty of suppressing luxury. We saw in the last chapter that luxurious consumption is less desirable from the national standpoint than thrift, forethought, and the investment of surplus income in the enlargement of industries and in buying objects of durable satisfaction. The difficult question is to know what to do about it. It is easy to demand that the government should repress luxury, but it is not so easy for the government to do it. One of the first difficulties is that of defining luxurious objects. There are not many objects whose uses are wholly luxurious. Coal in certain quantities is a necessity, but it may be consumed in luxurious quantities. The same may be said of most kinds of food and clothing. Again, that which is a luxury to one may be a necessity to another.

Another difficulty is found in the probability that the repression of luxurious consumption might lead to sloth and inaction. To prohibit the consumption of articles of luxury might very easily take away the motive to industry. If the people cannot have expensive commodities, they may take their luxury in the form of leisure, idleness, and self-amusement. This, as we saw in the last chapter, is even less desirable than luxurious consumption. An increase of wants sometimes has the effect of overcoming the tendency to sloth and idleness. If the government should make it impossible for men to gratify these increased wants, it would merely drive them back into sloth and idleness. This could only be counteracted by other laws compelling them to work.

Legislative control not always effective. One of the last things that we learn regarding legislation is that is usually takes a large number of new legislative acts to correct or counteract the unlooked-for results of any legislative act.

Another objection to legislative attempts to suppress luxurious consumption is the one pointed out by Adam Smith and others, to the effect that when their habits of life are fixed, men and women will frequently give up the necessaries of life before they will give up luxuries. This applies especially to the attempts to make luxuries expensive by taxing them. When they become very expensive, some people will insist on having them, even if it takes their whole income to buy them and leaves them little for the necessaries of life.

Voluntary frugality. These arguments, it will be noticed, are based upon the inefficiency of sumptuary laws rather than upon any more fundamental objection to them. In general they seem to produce results which are worse than the thing they try to cure. Nothing whatever can be said, however, against a voluntary foregoing of luxuries and a rationalizing of standards of living on the part of the people themselves. It is one thing for the people to want the right things; it is quite a different thing to try to force them to consume the right things whether they want them or not. It is one thing for the people voluntarily to give up luxuries; it is quite a different thing to compel them by law to do so, whether they are willing or not.

Control of vice is "sumptuary legislation." In some extreme cases, however, a luxury becomes so extremely demoralizing and dangerous to society as to justify government regulation or suppression. There may be undesirable results of such legislation,—there are pretty sure to be; but if these undesirable results are less undesirable than the thing which is suppressed, there is a net gain. Regulation or suppression of vice of all kinds is sumptuary legislation. If the vicious habit or the vicious form of consumption is sufficiently injurious, its suppression is justifiable, even though some undesirable results may follow.

There are, however, a good many sentimental objections to sumptuary laws which have no connection with the real objections. We are all consumers; and if the government begins regulating consumption we are each of us likely to come in for a certain amount of regulation. We are rather impatient of all kinds of

regulation when it is applied to ourselves, though we may be very patient of the regulation of other people, as we are patient in the contemplation of other people's troubles. We are not all of us in the banking or the railroad business, and do not feel in danger when the government undertakes to regulate those and other special lines of business.

No essential difference between controlling business and controlling consumption. This consideration has led to quasi-serious attempts to draw a sharp distinction between the regulation or control of business and the regulation or control of consumption. But all such distinctions are trivial. Habits of consumption, as stated above, are quite as important to the welfare of the nation as methods of doing business. To attempt to regulate or control either is certain to produce undesirable results. Nevertheless, where the evils, either of unregulated consumption or of unregulated business, are great enough we must have regulation and take our chances with the evils and difficulties of regulation.

Whenever a nation is facing a great crisis in its history, when its strength and endurance are being put to a severe test, when, in short, it is fighting for its life as a nation, the people are forced to think in terms of national life rather than in terms of individual life. At such times the people find it just as necessary that the government shall regulate consumption as that it shall regulate production. They also find that freedom of speech is not more sacred or inviolable than freedom of running a business. Compulsion is likely to apply in all fields of activity, not simply in the field of production and business management, of transportation and food distribution, but also in the field of consumption and even in the field of selling talk for a profit.

Luxurious consumption does not increase the demand for labor. There can be no doubt, however, that luxurious consumption is in itself an injury to the public, and particularly to the laboring classes, however inexpedient it might be for the government to use its power of compulsion to prohibit luxury. There is an ancient and nauseous fallacy which says that the extravagance of the rich gives employment to the poor. Nothing could be

farther from the truth. The extravagance of the rich gives much less employment to the poor than the accumulation and investment by the rich in various kinds of productive industry. The individual who buys extravagantly does, of course, set labor to work producing the objects of extravagance, but the individual who invests largely also sets labor to work producing the buildings, tools, etc. in which he invests. In addition to this he adds definitely to the productive power of the community. Furthermore, labor must be hired to make use of the buildings and the tools, and there is a larger social product out of which to pay wages. Comparatively speaking, therefore, the extravagance of the rich takes away from the employment of the poor. From that point of view extravagant consumption is a social injury.

Leisure versus luxury. If, as suggested above, there were no unlooked-for results from the suppression of extravagance, the state would be fully justified in suppressing it; but if the suppression of extravagance merely produced leisure and idleness, instead of extravagance, more harm than good would be done. We must conclude, therefore, that where a form of consumption has become so definitely vicious and injurious to the rest of society as to produce more harm than would probably result from compulsory suppression, then suppression must be justified. But where, even though it be harmful, it is not more harmful than other results which would probably follow from its suppression, then suppression is not justifiable. It must be remembered, however, that laws suppressing vice are in a sense sumptuary laws. The only difference between these and other sumptuary laws lies in the fact that the forms of consumption which they attempt to regulate or suppress meet with such general disapproval as to make their suppression popular, whereas in other cases the forms of consumption are not universally condemned and therefore their suppression is not generally approved.

Rationing the people. That school of social philosophers who hold that all forms of competition are inherently evil, and that therefore government compulsion and general regulation should be made use of to stop competition, would, if they were consistent,

desire to begin with sumptuary regulations. As stated in a previous chapter, there are three main forms of economic competition,—competitive production, competitive bargaining, and competitive consumption,—and of these three, competitive consumption is infinitely worse than either of the others. By an authoritative standardization of wearing apparel, food, and other forms of consumption we should tend to eliminate this worst form of competition. That would involve, of course, the organization of society on a semimilitary basis, though the object need not be military conflict. It would mean the prescribing of a satisfactory uniform for all members of the community and also of a uniform diet or ration. Houses, furniture, and other consumable goods would also have to be standardized and prescribed by government regulations.

There is no doubt whatever that if the people would accept this kind of regimentation and work cheerfully under it, as they probably would not, we should prevent the waste of a vast amount of energy and avoid many petty jealousies and heartburnings. Academic costume, whatever may be said against it on other grounds, has the advantage of saving academicians a great deal of perplexity over the question "Wherewithal shall we be clothed?" The costumes and vestments of certain religious orders answer the same purpose. There are also many religious sects, of which the Quakers of the old school were a good illustration, which succeeded in saving their people from that destructive form of competition which strives, first, to outshine one's neighbors in matters of dress, and, second, not to be outshone by one's neighbors.

In a time of great national crisis we have many illustrations of what people may accomplish in the way of economy and effort by putting the whole nation on a fixed ration and also by prescribing the manner of dress of each class in the nation. If the people would submit cheerfully to similar regulations in time of peace, all the vast energy which in time of war is devoted to the work of destruction could then be turned to the work of production, and industrial progress could proceed at a stupendous rate. It is not impossible that at some time in the future there may be a real

effort on the part of certain ambitious nations to economize their energy in this way in order that they may increase their strength rapidly in preparation for Armageddon.

EXERCISES

1. Granting that luxurious consumption is undesirable, does it necessarily follow that the government should repress it?

2. Is there any essential difference between controlling business and controlling consumption?

3. Does luxurious consumption increase or decrease the demand for labor?

4. Would it be economical if everybody would voluntarily standardize his or her clothes?

5. Would it necessarily be economical if the government should compel us all to wear standardized costumes as uniforms?

CHAPTER XLII

THE BATTLE OF THE STANDARDS

Efficient versus cheap standards of living. Where people who are equally industrious, intelligent, and capable are competing, the advantage in the long run will be on the side of the most thrifty. If they earn equal amounts in the present, the thrifty people will invest a part of their earnings so that, in the future, they will have larger incomes than the unthrifty.

This has sometimes led to the erroneous conclusion that a cheap standard of living would always drive out an expensive standard, merely because the cheap standard has greater competing power. It is asserted that people who are willing to live and multiply on a very small income will always tend to displace those who are unwilling to live and multiply except on a liberal income. If sheep and cattle are allowed to multiply and wander at will over the Western ranges, it is plain that the sheep will drive out the cattle, not because they are superior in value or in fighting power but merely because they are able to nibble closer to the ground and to live where cattle would starve. A similar law appears to operate throughout the human as well as the animal world. Those who can live on the least seem at times able to drive out all others by eating them out of house and home.

It must be confessed that there are some facts which seem to support this conclusion. The American laborers on the Pacific coast find it very difficult to compete, at least in the unskilled trades, with the Chinese and the Japanese. On the Atlantic seaboard employers of labor have been able to tap various reservoirs of cheap labor, first in northwestern Europe, later in southern and eastern Europe. These laborers, having been accustomed to very small incomes, are able and willing to work and multiply on incomes so small as to drive out, at once or ultimately, either the

American laborers or the immigrant laborers of a previous immigration. The later immigrants drive the earlier immigrants out directly by accepting lower wages than the earlier immigrants are willing to accept; they drive them out indirectly by multiplying rapidly and thus supplying a new stock of labor where the others would refuse to multiply.

In many farming communities it is found likewise that foreign-born farmers, who are willing to live on less than the American-born farmers, can, if necessary, pay either a rent or a price for land which would bankrupt the American farmer with his higher cost of living. Thus the land tends to pass into the hands of those farmers with the cheap standard of living. On the Pacific coast, again, the same tendency shows itself. The Chinese and Japanese farmers and gardeners are able to buy or rent land and pay a price which an American farmer with his higher standard of living would find impossible.

A cheap standard does not always drive out an expensive standard. It must be pointed out, however, that not every people with a low standard of living has high competing power. The Mexican peons have as cheap a standard of living as the Chinese coolies, and yet they do not compete successfully even with Americans, who have a higher standard of living. In other words, there must be coupled with a cheap standard of living considerable industrial efficiency. With equal industrial efficiency, the race with a cheaper standard of living seems to have the advantage in economic competition. On the other hand, with an equal standard of living, the race with the higher industrial efficiency has the same advantage in economic competition. In fact, we find that even with a more expensive standard of living, the race whose industrial efficiency expands in proportion to its cost of living holds its advantage in economic competition.

Competing power is equal to production minus consumption. This brings us back to the formula which was used in a previous chapter to express the value of a man: $V = P - C$. The value of a man is equal to his production minus his consumption. By his value we mean his value to his race or nation. That which he adds

to the total resources of his nation in excess of what he extracts from those resources is his net contribution to the strength of the nation. The nation will be strongest, in the long run, whose average citizen has the highest value in this sense. That nation will be weakest, in the long run, whose average citizen has the lowest value in this sense. But that citizen's value may be increased, not simply by reducing his consumption but by increasing the difference between his consumption and his production. Adding to his production is just as essential as keeping his consumption within efficient bounds.

If we seek a formula which will express the competing power of a whole nation, it must be very closely related to the formula which expresses the value of one of its citizens. The formula is $CP = P - C$; that is, the competing power of a nation is equal to its production minus its consumption. The nation or the race in which there is the widest margin between production and consumption will win in economic competition against all comers. If the American farmer were enough more efficient as a producer than the foreign-born farmer to compensate for his higher cost of living, he could hold his own indefinitely in economic competition.

It is not, therefore, the cheap standard of living which invariably wins; it is the efficient standard of living. A race with an expensive standard of living, provided every dollar of expense adds something to its productive efficiency, will always win in competition with a race with a cheap standard of living. If, however, the expensive standard is made expensive merely by the demand for luxuries and means of dissipation, the race is hopelessly handicapped and ultimately must lose in competition with other races. But if the cost of living is made high by the demand for strength-giving food and recreation, for means of mental stimulation, or for books, instruments of precision, and other means of technical education, such a standard of living may increase the margin between production and consumption rather than diminish it. In that case not only can the race possessing such a standard of living hold its own in competition at home but the members of that race can go anywhere in the world and hold their own in competition

with the natives. Such a race will be an expanding, colonizing race,—wherever its members plant themselves they will succeed and remain ; whereas, if their standard of living is merely expensive without being efficient, they are likely to fail as colonizers. If Americans develop an efficient standard of living they will make American soil wherever they plant the soles of their feet.

International competition. A race with a high but inefficient standard of living sometimes finds it necessary to protect itself, at least within its own boundaries, against the competition of races with a cheaper but more efficient standard. Otherwise they would find themselves ultimately dispossessed even of their land. The race with the cheaper and more efficient standard would not only get the jobs in industry but would eventually buy the farms and the businesses at prices which the natives would be unable to pay. The natives would give way before such a race as inevitably as before an army equipped with superior weapons of offense.

Moreover, the problem is not solved by the mere exclusion from our own territory of races with a cheaper and more efficient standard of living. The conflict is merely changed to another field, and the outcome postponed to a more remote period of time. International competition is just as real as individual competition within the nation, though it does not seem so real to the average person. In the competition for the markets of the world the nation with the cheaper and more efficient standard will have the same advantage as it would have in getting jobs or in buying farms and businesses within the confines of a given country.

The race with the expensive or inefficient standard may hold certain advantages because of the peculiarities of its geographical situation. If it possesses superior soil or superior mineral deposits, these physical advantages may compensate, in part at least, for the inefficiency of its standard of living and enable it to survive in international competition. Superior mineral deposits, however, must ultimately be exhausted. Superior soil can be maintained only by wise management. The nation that depends upon these material advantages for its future strength in international competition must look well to its problems of conservation. If it does

not, eventually it will lose these advantages, and then its more expensive standard of living will place it under a severe handicap. Though it need not necessarily perish as a nation, at best it will live at a "poor dying rate."

Even under conditions of international peace, here is a form of international rivalry which will still persist and under which the victory must ultimately go to the race or the nation with the most efficient standard of living; that is, to the race or nation in which the production of the average person exceeds his consumption by the widest margin.

The real Armageddon. Here is a real Armageddon, the battlefield of the nations—the place for the ultimate contest for supremacy among the various races and nations of the earth. This is the field where sooner or later every nation in the world must be brought to the test and made to battle for its very existence. It is a peaceful contest, but none the less deadly on that account. Preparedness for this ultimate and decisive conflict will consist in the study of standards of living and the adoption of such standards and habits as increase productive efficiency to the maximum and reduce the cost of living to the lowest point which is consistent with maximum productivity. In the interest of this form of preparedness it will be well for us to ponder the advice of Pythagoras to his son: "Choose those habits which are best; custom will make them the most agreeable."

EXERCISES

1. What is meant by an efficient standard of living? Is it the same thing as a cheap standard?

2. Does a cheap standard of living always drive out an expensive standard?

3. How will the efficiency of a nation's standard of living affect its success in international competition?

PART SEVEN. REFORM

CHAPTER XLIII

COMMUNISM

- Programs of Reform
  - Authoritarian
    - Communism
    - Socialism
    - The single tax
  - Anarchistic
    - Philosophical
    - Exaggerated egoism
    - Emotional
  - Liberal (the equalization of bargaining power under the system of voluntary agreement among free citizens)

Compulsion versus freedom. The schemes for the improvement of social conditions fall into two general classes: first, those which rely upon the compulsory power either of a benevolent despot or of the mass over the individual; and, second, those which rely upon voluntary work by individuals under the principle of free contract. Among those which rely upon the authority of the mass or group over the individual, communism is the most extreme. It is sometimes called coöperation, but it is compulsory coöperation as distinguished from voluntary coöperation. The compulsion is made complete by the fact that the community, or the group, owns all the property and the individual owns none. All the processes of production and distribution are carried on by the community as a whole rather than by individual initiative and voluntary agreements among individuals.

Meaning of communism. Communism may, therefore, be defined as a type of social organization in which all wealth, including both producers' goods and consumers' goods, is owned and controlled by the community. It differs from socialism in that the latter proposes that the community shall own and operate only producers' goods, leaving the consumers' goods to be owned and enjoyed by individuals. A completely communistic society, for

example, would own the dwelling houses and even the food and clothing, but would distribute these to the individual members very much as they are now distributed within the small group which we call the family.

Relation to anarchism. Theoretically communism would be at the opposite end of the scale from anarchism, which is an absence of all government,—at least the absence of all compulsory government. In actual fact, however, it is not always easy to distinguish between a communist and an anarchist, as there is a considerable group of individuals who call themselves anarchist-communists; that is, they are opposed to any kind of government which resembles those with which we are now acquainted. They would substitute small communistic groups, each one working more or less independently of the others and making such voluntary arrangements for exchange of products as they might find to their mutual advantage. In so far as they would oppose all compulsion they would be called anarchists; in so far as they would have all wealth owned in common, at least within small groups, they would be called communists. Unless, however, the small group could exercise some compulsory control over the property of the group it would be anarchism rather than communism. If the group did exercise orderly control over its own property to the exclusion of individuals and rival groups, it would be compelled to exercise compulsion and would therefore, to that extent, cease to be anarchistic and become purely communistic.

Utopias. Naturally enough communism has never been tried on a large scale, though there have been many small experiments. It has been advocated by many philosophers, both ancient and modern. Many pictures have been drawn of ideal societies in which communism was the outstanding feature. Plato, in his "Republic," pictured such an ideal commonwealth. Not only was all wealth to be held in common but wives and children likewise. Defective children, or children who seemed likely to be a burden rather than a help to the state, were to be disposed of in early infancy. Sir Thomas More, in his "Utopia," presented another picture of an ideal society based upon communism. In order to give

an impression of reality he pictured some travelers in South America who had discovered a new country, in which communism prevailed. Francis Bacon gave us a somewhat fragmentary picture of his ideal of society in his "New Atlantis." Tommaso Campanella, in "The City of the Sun," and various other writers have kept alive the ideal of a communistic society. In more recent times we have such books as "News from Nowhere," by William Morris; "The Cooperative Commonwealth in its Outlines," by Laurence Gronlund; and "Looking Backward," by Edward Bellamy. This is a list of distinguished writers, and their books make attractive reading. They show pretty clearly how persistently the world has dreamed of social conditions in which there should be no rivalry of interests, no quarreling and bickering over questions of property,—of mine and thine.

It is not very difficult to show where these pictures are defective and how impractical such schemes of social organization are. The world at large, or at least a great majority of the people of the world, has put very little confidence in these proposals; but probably no generation has been without a certain number of spirits who have retained their belief in those peculiar ideals of justice and economy which these Utopian works have set forth.

Experiments: the primitive Christians. Nor have actual experiments been wanting. The primitive Christian Church is frequently referred to as an example of communism. One or two passages in the Acts of the Apostles indicate that the first Christians, at least, maintained a communistic fund for the maintenance of impecunious members. For a short time they appear to have put practically all of their possessions into a common fund. It will also be noticed that they not only put their possessions into a common fund but they stopped working and remained together in one place, awaiting the second coming of the Lord. This makes it appear as though communism were not with them an ideal scheme of social organization, but merely a convenient arrangement by means of which they could live while preparing for the end of the world and their sudden translation to heaven. They soon went back to work and forgot their communism.

The Spartans. The Spartan commonwealth is likewise referred to as a communistic society. According to the account given in Plutarch's "Life of Lycurgus," there were many communistic features about the life of the Spartans. It appears to have been the communism of a military camp, however, for the Spartans themselves were only a small clan, or caste, ruling over a much larger population of subject people. In order that they might be strong in a military sense, and hold the masses of the people in subjection, they organized themselves very much as a military camp has always been organized. There was no communism whatever for the mass of the people. It extended only to the small aristocratic and ruling class called Spartans.

The monasteries. Most of the monasteries of the Middle Ages were organized on a communistic basis. They also practiced celibacy, showing that they did not regard communism as the ideal basis of a continuing human society. The whole monastic life was organized for the purpose of promoting spirituality rather than for the purpose of reforming human society.

The Taborites. Certain extreme sects among the early Protestants attempted some kind of communistic life without celibacy, but never made much of a success. Conspicuous among these were the Taborites, an extreme faction of the followers of John Huss, the Bohemian reformer. They withdrew from the city of Prague and started a community on a hill to which they gave the name of "Mount Tabor." They hence became known as the Taborites. So long as they were thoroughly united by their religious sentiments they worked very successfully, not only in productive industry but even in war, for the great Austrian Empire sent army after army against them. They defeated the imperial armies because of the superiority of their organization. But eventually dissensions arose among them; they were divided and overthrown, and their community was broken up.

American experiments. America has been a fruitful field for the trying out of all sorts of experiments. Many of the first colonists came here because they were inspired by religious sentiments. They founded colonies where their religious ideas could

flourish. This continent presented a virgin field where people with peculiar ideas of religious organization or of social economy could come and put their ideals to the test.

The outline on the following page gives a rough classification of the more important of these experiments. There were many not included in this list, which were either unimportant as to numbers or so short-lived as to make them unworthy of mention. It will be noticed that the long-lived communities were all religious in their nature. Of the nonreligious communities only one, namely, the Icarians, lasted a single generation, whereas several of the religious communities have lasted half a century, and one group of communities (the Shakers) has several colonies that have survived for more than a century.

Religious communities. Many of the religious communities, it will be noticed, are of foreign origin, and most of these are of German origin. The Shakers are placed among those of American origin. As a religious sect the Shakers originated in England, but they made their experiments in communism in this country. They have established numerous colonies from Maine to Kentucky. They are celibates, and therefore their continuing existence depends upon their ability to make converts. This they have failed to do in recent years, and consequently the Shaker communities are dying out as the old people drop away.

The Perfectionists originated in Vermont under the leadership of Mr. John Humphrey Noyes. They afterwards moved to Oneida, New York. They have given up communism and have organized themselves in the form of a joint-stock society and are still prosperous and doing a thriving business, having found that the practical experience of the real world is a better guide than pure idealism.

A multitude of other experiments of a more or less religious nature have been carried out by faith healers, Adventists, and other people of rather extreme religious views.

Of the religious communities of foreign origin that at Ephrata, Pennsylvania, was the first to be organized on a durable basis in this country. Like the Shakers, they were celibates and were therefore doomed to extinction.

- **American Communistic Societies**[1]
  - **Religious**
    - **Of American origin**
      - The Shakers (numerous colonies), Maine to Kentucky, 1787–
      - The Perfectionists of Oneida, N.Y., 1848–1879
      - Zion City, Ill., 1890–1896
      - Jemima Wilkinson's New Jerusalem, N.Y., 1786–1820
      - Celesta, Pa., 1852–1864
      - Salem-on-Erie, N.Y., 1867–
      - The Woman's Commonwealth, Tex. and Washington (D. C.), 1880–
      - The Lord's Farm, N. J., 1877
      - Shalam, or the Children's Land, N. Mex., 1884–1901
      - Estero, Fla., 1904–
      - The Christian Commonwealth, Ga., 1896–
      - The House of David, Mich. (?)
    - **Of foreign origin**
      - Ephrata, Pa., 1732–
      - The Harmonists, Pa., 1803–
      - The Separatists of Zoar, Ohio, 1819–1898
      - The Amana Society, Iowa, 1843–
      - The Bishop Hill Colony, Ill., 1846–1862
      - The Bruederhof Communities, S. Dak., 1862–
      - The Waldensian Colonies, N. C. and Tex., 1893–
      - St. Nazianz Colony, Wis., 1854
  - **Non-religious**
    - **Owenistic**
      - New Harmony, Ind., 1825–1827
      - Yellow Springs, Ohio, 1824
    - **Fourieristic**
      - Brook Farm, Mass., 1841–1847
      - Fruitlands, Mass., 1843
      - Hopedale, Mass., 1841–1858
      - North American Phalanx, N. J., 1843–1856
      - Wisconsin Phalanx, Wis., 1844–1850
      - Northampton Association, Mass., 1842–1846
      - Numerous others
    - **The Icarians**
      - Nauvoo, Ill., 1849–1866
      - Cheltenham, Mo., 1858–1864
      - Icaria, Iowa, 1860–1895
    - **Independent**
      - Skaneateles Community, N. Y., 1844–1846
      - Polish Colony, Anaheim, Calif., 1876–1878
      - The Ruskin Commonwealth, Ga., 1896–1901
      - The Coöperative Brotherhood, Wash., 1898–
      - Equality Colony, Wash., 1897–
      - The Straight Edgers, N.Y., 1899–

[1] Based on "American Communities," by W. A. Hinds. Chicago, 1908.

One of the most successful of all these experiments was started in western Pennsylvania by some German pietists among the followers of one Georg Rapp, from whom they were given the name "Rappists." They afterwards moved to Indiana, where they sojourned for a time at New Harmony in the southwestern corner of the state. After a few years they sold out and moved back to Pennsylvania. Their colony, known as Economy, was a place for sightseers for many years.

The Separatists of Zoar and the Amana Society were somewhat similar in their origin and in their subsequent history. They did not practice celibacy. They prospered amazingly and presented a very attractive life as seen by visitors from the outside. They were animated by intense religious enthusiasm and by devotion to their own leaders. The Separatists of Zoar, however, gave up communism in 1898, largely because the younger generation had lost something of the religious zeal of the older generations and decided that they preferred the individualistic type of life to the communistic. The Amana Society is still flourishing, and the people are apparently satisfied.

The Bishop Hill Colony in Illinois was a Swedish colony; its character and organization resembled most of the others. When they lost their intense religious zeal they likewise lost their enthusiasm for the communistic type of life and gave it up.

A series of communistic societies is still flourishing in South Dakota. They are known as the Brotherhood Societies.

Several communities of North Italian Protestants have flourished in the South, particularly in Valdese, North Carolina, and near Gainesville, Texas.

Nonreligious communities. In 1822 Robert Owen, a great English philanthropist and a firm believer in what was then called socialism, came to America for the purpose of establishing an ideal community. He delivered many addresses and created much enthusiasm. In looking about for a location he found that the Harmonists, who were then living in New Harmony, Indiana, were desirous of selling out and moving back to Pennsylvania. He bought all their real estate and proceeded to establish a colony of

his own. He was a man of great ability, who had made a fortune of his own, which he devoted liberally to the propagation of his ideas. His colony, however, was made up of idealists who were more in the habit of talking about their theories of society than of working to produce wealth; it was a good illustration of the inability of any community to live on talk. It lasted a little over two years, largely at the expense of Mr. Owen. Numerous other experiments of the same kind were tried, none of which lasted for a single year. One at Yellow Springs, Ohio, lasted for several months.

About 1841 the works of a French communist, Fourier, were translated and published in this country. They created great enthusiasm, and a large number of experiments were made. The most notable of these was Brook Farm, Massachusetts, which was started independently but afterward adopted the plan of Fourier. This experiment was notable mainly because of the great names in its list of members. Some of the most distinguished men and women of that day, in letters and in scholarship, joined the Brook Farm community. The most successful of the Fourier experiments, however, was the North American Phalanx in New Jersey. It lasted for thirteen years. An experiment at Hopedale, Massachusetts, was only partially communistic; it lasted seventeen years and then became a joint-stock association.

As indicated above, the most successful of all the nonreligious communities in this country was the Icarian community in Iowa. They were followers of Étienne Cabet, a French communist, who wrote a very attractive book entitled "A Voyage in Icaria." It awoke the slumbering idealism of many French people who desired to form a commonwealth after the description of the life of the Icarians. Cabet led his followers to this country and landed in New Orleans, hoping to establish them in northeastern Texas. The land proved inaccessible and the climate not very agreeable. They returned to New Orleans discouraged, but learned that the Mormons had recently been driven out of Nauvoo, Illinois. They proceeded by boat to Nauvoo and established themselves, finding plenty of vacant houses and factory buildings. Here they prospered for a number of years, but they wished to find a

situation where they could be more to themselves. A tract of land was bought in southwestern Iowa, not very far from the present town of Corning. There they lived under the communistic system until 1895, when they gave up communism and came over to an individualistic régime.

A large number of other societies have been established by the followers both of Robert Owen and of Fourier and in recent years by the admirers of Laurence Gronlund and Edward Bellamy.

Results. It may seem as though the experiences of these numerous communistic societies tended to throw discredit upon all communistic ideals. The advocates of communism, however, insist that the principles of communism are still sound, even though a thousand communities fail. To an impartial observer it looks as though communism might work very well if people were built on a communistic plan. If they have a passion for communism or a powerful religious emotion which will overcome their individualistic and particularistic tendencies, they may live together peaceably under communism. Unless they are inspired with religious zeal or a genuine passion for communism, it seems as though the natural individuality, not to say the contrariness, of human nature would continue to break up all communistic societies in the future as it has in the past.

But why, it may be asked, will not communism work in a large national group as it now works in a small family group? It does not seem to work particularly well in *some* families. In those few abnormal cases where the members of the family have no particular affection for one another, the question of the division of the family funds is a difficult one. If the father is selfish and cares nothing for the others, he becomes an autocrat and spends all or the greater part of his income upon himself. If the others feel the same way toward him and one another, they quarrel among themselves. But in a normal case, where an intense affection for one another prevails, there is no quarreling and everything is shared in common.

If it were possible for the members of a large national group to feel toward one another as the members of a normal family

feel, communism or almost any other system might work well. But the average man's capacity for affection is limited. It would take one with a genius for friendship to feel a warm affection for even a hundred separate individuals, to say nothing of a hundred million. It would be practically impossible for any of us to feel toward each other and every one of a hundred million people, only a few of whom we have ever seen, precisely as we do toward our own brothers and sisters, fathers and mothers, and other very near relatives. This is sufficient reason why communism cannot be made to work well. It would probably work very much as a family works when family affection has disappeared.

EXERCISES

1. How should you classify the different programs of reform?
2. What is communism? How is it related to anarchism?
3. What is meant by a Utopia?
4. Have there been any experiments in communism?
5. Where have most of these experiments been tried?
6. Have religious or nonreligious experiments had the greater success?
7. Give an account of some of the more successful?
8. Why have they generally failed?
9. In what sense is a family communistic?
10. Does the family succeed where there is no family affection?
11. Is it likely that any other form of communism would succeed without a strong bond of affection?

CHAPTER XLIV

SOCIALISM

Socialism and communism have shifted meanings. The term "socialism" has a variety of meanings, though there are certain elements common to every definition. During the last seventy-five years the meanings attached to socialism and communism have been shifted. That which is now known as socialism was formerly known as communism. Karl Marx, who is regarded as the great apostle of modern socialism, called himself a communist. On the other hand, "socialism" was applied to general schemes for social amelioration which did not involve any fundamental change in the organization of society. Communism, however, fell into disrepute, and its followers discarded the name and began calling themselves socialists.

There is a tendency on the part of followers of any program or movement to define their program in the most favorable terms possible. This applies to socialists as well as to other propagandists. Sometimes this tendency leads to a definition of socialism which does not define, but which includes the opponents as well as the defenders of socialism. When it is said, for example, that socialism teaches the doctrine that only he who produces shall consume, it may be replied, "So also does individualism" and practically every other "ism" that has anything to do with the production and distribution of wealth; when it is said that socialism teaches the doctrine of equality of opportunity, it may be replied, "So also does individualism" and all the other "isms."

The difference between a socialist and a nonsocialist. In order to define socialism we must find something which will completely distinguish the socialist from the nonsocialist. The only definition that will do this is the following: A socialist is one who believes that the community, the public, or the government should

own and operate the means of production, leaving to individuals the ownership of most articles of consumption. By the means of production are meant practically all that is included under the names "land" and "capital" (farms, factories, railroads, mercantile houses, and office buildings would all be included); under the program of socialism all these things would be owned and operated by the community, the public, or the government. This would mean that every individual would be in the employ of the government in one way or another. Since there would be no private enterprise, no one could start a farm, a factory, a store, or any business enterprise of his own. Since no one could start any such enterprise, no one could be employed by a private employer. Since no one could be either in his own employ or in the employ of any private organization, everyone would have to be in the employ of the government.

Distinction between socialism and populism. There is some difference of opinion among socialists as to how far this principle of government ownership and operation should extend. Some are willing to stop with trusts and monopolies. This, however, is populism rather than socialism. It is based not on a theory of capital but on a theory of monopoly. Many people who favor the private ownership of capital are opposed to monopoly and believe that the best way to curb monopoly is to turn all monopolistic enterprises over to the state. Such a person might reject utterly all socialistic theories respecting capital. Moreover, every thoroughgoing socialist really bases his conclusions on his theory of capital. The work of Karl Marx, "Capital," has been called the Bible of the modern socialist. This book pays very little attention to the question of monopoly; it consists almost entirely of an attack upon private capital and production under private enterprise. From Marx's point of view it is not monopolized capital, but capital as such, that gives its owner the power to exploit and defraud other people. The capital belonging to a farmer as well as that belonging to a great trust, to a small manufacturer as well as to a large manufacturer, to the driver of a jitney bus as well as to a street-car company, is to be owned and operated by the public.

On the other hand, the slogan "Let the nation own the trusts" has nothing to do with capital as such. Such a program is based entirely on a theory of monopoly, which is the essence of populism rather than of socialism. Those who attack monopoly may quite consistently hold to the idea that capital which is not monopolized is a help rather than a hindrance to labor, that he who accumulates capital by consuming less than his income is benefiting rather than injuring labor, and that therefore everybody ought to be encouraged to accumulate capital and invest it in productive enterprises. From this point of view the individual who has accumulated capital and invested it in a productive enterprise has not only increased the productivity of the community but is entitled to some reward for that service which he has performed. This reward would be called interest. The populist, therefore, would approve of the receipt of interest on the part of the owner of unmonopolized capital.

Socialism opposed to private capital. All the great authoritative books on socialism are fundamentally opposed to interest or to anyone's receiving any income from the ownership of capital, or any advantage from his own accumulations. If labor is the only producer of wealth, the saver and accumulator is not a producer and is therefore not entitled to any share in the product. Since interest is the share which goes to the accumulator and investor, it cannot be justified under the socialistic philosophy.

Difference between a socialist and a liberalist. The definition of a socialist as one who believes in the common, public, or government ownership of all the means of production separates the socialist not only from the populist and the communist but from the liberalist as well. Moreover, this is the only definition which will at all distinguish the socialist from the liberalist. The liberalist is quite as desirous of economic justice and of equality of opportunity as the socialist is, but he believes that the liberal program is better adapted to the securing of those ends than the socialist program. The liberal program permits the private ownership of capital, and it also permits the receipt of interest as a private reward, on the ground that the accumulation of capital is a

productive service,—not that it is philanthropic, but that it is useful to society and worthy of a reward.

In order to becloud the issue it is sometimes stated that the socialist believes that men should be paid for doing things, and the liberalist that men should be paid for owning things. The liberalist does not believe that men should be paid for owning things *unless* the ownership is a symptom of their having done something which was useful. If two men, A and B, have been doing equally good work with their hands and their heads and have earned equal incomes, they should be paid the same according to the liberalist as well as the socialist. If, however, A consumes all his income, but B invests a part of his in the tools of production, the liberalist believes that B has done better than A. If everybody did as A does, the nation's stock of tools would never increase; if everybody did as B does, the nation's stock of tools would increase rapidly. The more citizens it has of the B type the more prosperous will the nation become; the more it has of the A type the less prosperous will it become. It is very important that men should be encouraged to join the ranks of the B's rather than of the A's. The liberalist therefore holds that there should be some inducement to men to do what B has done; namely, to invest a part of their income rather than to consume it all.

There is no other definition of socialist or socialism which will separate the socialist from the nonsocialist or which will particularly separate him from the liberalist. The term "liberalist" is justified because the liberalist believes that, so far as possible, each individual should be at liberty to start his own enterprise if he is so disposed, or to work for someone else if he prefers,—that he should be at liberty to work for private individuals or to work for the government, according as he can make the most satisfactory voluntary agreements. In short, the liberalist is willing to trust men with the power of free contract, whereas the socialist relies mainly on the government's power of compulsion.

Socialism involves more use of the government's power of compulsion than liberalism does. It has been said that the power to tax is the only capital the government needs. The power

to tax is compulsion. In order to carry out a socialist program the public would have to use its power of compulsion in many ways. It would have to prohibit competition by private individuals against the state, as it now forbids private individuals to compete with the post office in the carrying of first-class mail. It would have to use its taxing power to compel the payment of deficits whenever deficits occurred.

The liberalist, on the other hand, proposes to reduce to a minimum the compulsion of the government over the individual. An industry which cannot be carried on without any compulsion whatsoever had probably better be left to die, unless it be one which is necessary for military protection.

If, for example, an individual who desires to manufacture shoes cannot manufacture them successfully without the power of compulsion, he should not manufacture them at all. If he can buy his raw materials on the open market, hire his labor on the open market, and sell his product on the open market, making use of voluntary exchange and voluntary agreement in every case, and can manage to make a profit out of his business, he is entitled to remain in business. It shows that he is efficient enough to assemble the various factors of production in such a way as to produce an article which is worth more than the cost of the factors of production. This is highly economical. If, in order to make a living, he had to be paid out of the public treasury, and the public had to make use of its power of taxation in order to get the wherewithal to pay his salary, there is a strong probability that the product would not be worth as much as the factors which entered into it. In that case the power to tax would have to be made use of to keep the business going; but the fact that compulsion was necessary would be proof that it ought not to be used, but that the business should die a natural death.

Where there is no free bargain and sale,—where consumers are not at liberty to turn from one producer to another and buy whatever suits them best, where the producers of raw material are not at liberty to sell to any manufacturer who will pay them the highest price, and where labor likewise is not free to bargain to

its own advantage,—there is no assurance that the maximum economy will be secured.

Compulsion sometimes necessary. It is not to be inferred, however, that the liberalist is an anarchist and therefore opposed to all exercise of compulsion or governmental power. He is one who believes that a great many lines of production can be safely and successfully carried on without the use of compulsion, under voluntary agreements, free contract and sale, and individual initiative. He also quite frankly recognizes that there are many things which cannot be done in this way.

For example, the forestation of certain mountain slopes would be undertaken by private enterprise only when the enterprisers thought that it would be profitable to them. But, although it might be unprofitable when considered by itself, it might still be highly profitable when considered from the viewpoint of the nation as a whole. If the deforestation of high mountain slopes results in the overflow of streams and the destruction of valuable land along the lower watercourses, this is a matter which affects the country as a whole but might not interest the individual owners of the high slopes. If they found it profitable to cut off the timber and sell it, they would do so even though property of much greater value a few hundred miles away on the river bottoms were destroyed.

Here would be a clear case where government enterprise would be superior to private enterprise. But similar reasoning would in some cases prove the superiority of international enterprise over government enterprise. It often happens that the high mountain slopes are within the territory of one nation and the river bottoms in the territory of another. In that case the nation owning the high mountain slopes would have no interest in protecting the river bottoms. Nothing but an international arrangement could solve that problem.

Again, take such an enterprise as the building of lighthouses. The private individual who built a lighthouse on a rocky coast would scarcely be able to collect toll or to get payment for the utility which he was furnishing. Not having the power of compulsion, he could not force mariners to pay, nor could he tax the

public at large in order to build and maintain lighthouses. The government alone has this power of compulsory collection. In any other case (and there are many of them) where it can be shown that freedom of contract will not succeed in getting an important work done or an important utility produced, the liberalist is willing to see compulsion used.

"Socialism," like "vegetarianism," an exclusive term. "Liberalism" is therefore not an exclusive term, as "socialism" seems to be. One is not a vegetarian by virtue of the fact that one sometimes eats vegetable food; one is a vegetarian only when one refuses to eat anything else. A liberalist with respect to food is willing to eat any kind which seems to him desirable. In a similar sense, one is not a socialist by virtue of the fact that one is willing that the government should do some things; one is a socialist only when one believes that the government should do everything or that private individuals should not carry on any productive industry or own any productive property. The liberalist is willing that industry shall be carried on in any way that seems to promise desirable results. If an individual farmer can grow corn successfully, the liberalist is willing that he shall do so and likewise make a profit; and so on. He perhaps goes a step farther and believes that preference should be given to free and voluntary business arrangements rather than to compulsion, and that compulsion should be used only when the voluntary system fails to get desirable things done.

Criticism always easy. As to the merits of the socialistic program as compared with other programs, there will always be considerable differences of opinion. It is not difficult to point out with a great deal of particularity the evils that result from a liberal policy. The unfortunate condition of those people who are not in a position to bargain to their own advantage is perhaps the strongest argument used by the present-day socialists.

Unfortunately it is easy to find many communities in which certain classes of laboring men find it impossible to get good wages by the method of voluntary agreement, whereas other people who use this method get larger incomes than are necessary or

desirable. This condition, however, is not confined to labor. Anyone who is trying to sell anything with which the market is oversupplied is in a more or less helpless position. When more is offered for sale than buyers care to buy, the seller is very dependent, whereas the buyer is independent. Under the system of voluntary agreement the seller must take what he can persuade the buyer to pay, and the buyer can take his choice. If, however, the conditions are reversed and buyers want to buy more than sellers are willing to sell, then buyers are very dependent; they must take whatever they can persuade the sellers to sell, whereas sellers are independent and can take their choice.

It happens that certain kinds of labor seem almost chronically to be in this position of dependence. They always, and rightly, evoke sympathy. There are two ways, however, of correcting the difficulty. One is to substitute the system of compulsion for the system of voluntary agreement; the other is to make that kind of labor scarce and hard to find and to increase the demand for it.

Seeing that these unskilled laborers are so frequently at a disadvantage under the system of voluntary agreement, it looks rather obvious to some people that something else must be substituted. But the liberalists maintain that labor is not necessarily, and not always, at a disadvantage under the system of voluntary agreement. If you can distribute the labor supply so that there will not be too much of one kind in proportion to the other factors, then the laborers will be in a position of great independence.

It is not difficult to point out instances where the laborer is independent and the capitalist dependent,—where the preservation of the capitalist's property, where even his income itself, depends on getting labor when there is not enough labor to go around. In such cases the laborer can take his choice of employers. There need not be the slightest difficulty in creating such conditions for labor in general, but it will require the following of a program radically different from that of the socialist. It looks much easier merely to exercise the compulsory power of the state and cure the difficulty at one stroke. Not many difficulties, however, are permanently cured at one stroke or by the exercise of compulsion.

Why there are socialists. When the victim of a wasting sickness goes to a physician for help, he is very likely to be disappointed. The physician, if he is scientific and therefore honest, can seldom promise him a definite cure. Being a scientific man, he can point out the causes which produce the illness and say that, if at some time in the past the patient had pursued different habits, he would not have become ill. This, however, is cold comfort to the sick man who is suffering intense pain. Or the physician may prescribe a course of treatment which, if rigidly followed for a period of time, will tend to remove the causes of the illness and eventually improve the patient's condition. This likewise is cold comfort to the man in pain, who wants immediate relief. Such a man is in a good frame of mind to lend a favorable ear to the "doctor" with a specific remedy who promises him a specific cure.

Similarly, the man who is in the grip of poverty, as well as his sympathizers, is likely to be disappointed with the program of the economist. The economist, if he is a scientific man and therefore honest, will be compelled to say that there is no immediate relief which is not likely to produce worse results in the future. Being a scientific man, he can point out the conditions which tend to produce poverty and can prescribe policies which, if they had been pursued consistently for a number of years, would have prevented the poverty which now exists. This is cold comfort to the man who is already suffering from poverty and longing for relief. Such a man is in a condition to lend a favorable ear to the doctor with a specific remedy. The obvious and specific remedy which is commonly urged by socialists is the compulsory power of the state or of the mass over the individual.

EXERCISES

1. Why have "socialism" and "communism" shifted meanings?
2. What is the present meaning of the word "socialism"?
3. How should you distinguish between a socialist and a nonsocialist?
4. What is the distinction between socialism and populism?
5. What is the difference between a socialist and a liberalist?

CHAPTER XLV

THE SINGLE TAX

Meaning of the single tax. By the single tax is meant a policy under which all the public revenue is to be raised by a single tax on land value. One of the most persistent misinterpretations of the single tax is to assume that it means a tax to be raised on real estate rather than on land values. Land value is defined as the value of the land itself irrespective of all improvements, such as ditching, draining, fencing, the planting of trees, and the erection of buildings. In short, everything done on the land itself to improve the value of an estate is classed as an improvement and, under the single tax, would be exempt from taxation. This leaves nothing except the location value and the fertility to be taxed.

The physiocrats, believers in the "rule of nature," believed in the *impôt unique*. The original advocates of the single tax were a group of French economists called physiocrats. It was their belief that land was the original and fundamental source of all wealth, and that the rent of land was the only real surplus wealth which the community ever produced. From their point of view, rent was due to the bounty of nature. They believed that every other tax must eventually be paid out of rent anyway, wherever it may have been laid by the government. If you tax the products of industry, they said, there is no surplus out of which the tax can be paid; as a result you either raise the price of the products or depress the price of the raw materials. If you tax labor, you must raise wages accordingly; if you tax enterprise, you must raise profits. Every tax, therefore, is shifted from one to another till it reaches the landowner, who alone has a surplus out of which it can be paid. The landowner cannot shift it any farther, and, since he must ultimately pay the tax, they argued that it was better for him to pay it directly in the first place than indirectly

after several shiftings from one person to another. They regarded the single tax as a good system of taxation for raising revenue, not as an engine of social reform.

The classical economist regarded rent as a peculiar income. The idea that landowners who live entirely upon the rent of land are in a peculiar sense nonproducers is by no means new. Adam Smith[1] wrote, in 1776, "As soon as the land of any country has all become private property, the landlords, like all other men, love to reap where they never sowed, and demand a rent even for its natural produce." And again, "They [the landlords] are the only one of the three orders whose revenue costs them neither labor nor care, but comes to them, as it were, of its own accord, and independent of any plan or project of their own."[2] Economists from Adam Smith down have generally agreed on this point, though they have not generally agreed that this is the great cause of poverty nor that the abolition of ground rent would be a social panacea.

Ricardo, in developing his theory of rent, laid emphasis upon the fact that rent arises from the niggardliness rather than from the bounty of nature, thus taking a position opposed to that of the French physiocrats. This niggardliness shows itself in two ways: first, the best land is always limited in area; second, its productivity is limited. On any given area the amount of any crop which can be produced is limited; and even before that limit is reached, diminishing returns are received from successive applications of labor and capital. Because of these limitations upon the productivity of the best land, poorer and poorer land must be taken into cultivation as the demand for products increases. The fortunate possessors of the better grades of land are then in a position to demand a rent for their land.

The single tax made an engine of social reform by Henry George. It was the late Henry George, in his book entitled "Progress and Poverty," who seized upon these ideas to make the single tax an engine of social reform. He began his inquiry by pointing

[1] Wealth of Nations, Bk. I, chap. vi.
[2] Ibid. Bk. I, chap. xi.

out that even in the midst of plenty, poverty still persisted. He stated that though the productive power of the world had increased many fold through mechanical improvements, nevertheless large numbers of people remained in poverty. In fact, he went so far as to insist that increasing numbers were compelled to live in conditions of increasing squalor.

The persistence of poverty the great reproach upon civilization. This phenomenon of the persistence of poverty in spite of the world's increase in productive power has been an enigma ever since the rise of mechanical industries. Various answers to the puzzle have been given. Karl Marx and his followers attributed it to the fact that the owners of capital absorb all the benefits of the increase in productive power, leaving the nonowners of capital no advantage whatsoever.

It is very easy to say—in fact, it looks like mere arithmetic to say—that with the same rate of productiveness, if certain classes who are now receiving large incomes should not receive them, there would be more left for other people. If the incomes of capitalists and landowners were cut off, more would be left for the laborers, provided the total production remained the same. It would be equally true from an arithmetical standpoint to say that if the skilled laborers and the high-salaried people did not receive so much, more would be left for the rest, if the rate of production remained the same. In other words, if you assume a given rate of production and then assume that the incomes of certain classes are cut off, you can demonstrate that this would leave more goods for the other classes. This, however, is not a convincing argument. If anyone performs an important function in society, and thereby makes society richer, it cannot be said that by cutting off this person's reward for performing his function, society will be improved. By the cutting off of his reward there is the danger of killing the goose that laid the golden eggs; by so doing you may reduce his motive for labor and cause him to perform a less important function than he would if he were adequately rewarded for his effort. The real question is, therefore, whether the capitalist performs a function in society commensurate with the reward

which he receives. If the answer is in the affirmative the cutting off of his income would hardly be a help to society. The same reasoning applies to the landowner: if he performs a function commensurate with the reward which he receives, it would obviously not help matters to cut off his income. So here again the real question is whether or not the landowner performs a function commensurate with the reward which he receives.

Distinction between location value and fertility value. In the chapter on Land we saw that the two economic factors in land value were location and fertility. In so far as the value of land is based primarily on its fertility, that value may be easily destroyed and with difficulty replaced; and, in fact, the land of little fertility may, by careful and scientific farming, be greatly increased in fertility. This increase would be classed as improvement, and the increase in value would be similar to the increase which results from ditching, draining, irrigating, fencing, clearing, and other forms of improvement. Even where the land possessed original fertility—that is, where it is known as virgin soil—it may easily deteriorate under bad management or improve under good management. It is as much in the interest of society that good land be kept from deteriorating as that poor land be improved in fertility. If the owner of land is allowed the advantages of any improvements in fertility which result from his management, no one could, of course, consistently object to it. Again, if he is made to suffer some penalty for allowing the land to deteriorate in fertility by his bad management, it would seem equally just.

Putting these two propositions together, it seems as though the owner of the land, whether it be good or poor land, should be rewarded for any improvement resulting from his good management and penalized for any deterioration resulting from his bad management. If the single tax were applied rigidly, and the value not only of the location but of the soil itself were taxed away, the owner would get neither reward nor penalty. That is to say, if he were taxed for the full value of his land while the soil possessed its original fertility, he could easily "mine" the soil, as it is called; that is, he could rapidly exhaust the fertility and pocket

the temporary advantage from it. Then, after the land became less valuable, the tax would have to come down, or the owner could abandon the land or turn it over to the state whenever it became so poor as not to be worth the tax.

But if he is allowed the full value of the fertility of his soil, he has a much stronger motive for preserving or increasing its fertility. In the pursuit of this advantage, or in the warding off of the disadvantage of deterioration, he performs an important public function,—that of conserving the fertility of the soil. His reward will bear some ratio to the value of the service which he performs. To cut off his reward would not be to the advantage of the public, because the result would be that he would allow the soil to deteriorate, and this would result in a smaller production. The rest of society, as well as the landowner, would suffer from this policy. The single tax would put the owner in the position of a tenant who had to pay the state, in the form of a tax, all that the land would rent for. Tenants are notoriously careless in the matter of conserving soil fertility.

In respect to location value, this argument scarcely applies. In some cases, it is true, the enterprise of the landowner has created location value. This occurs when he himself builds a road instead of asking the public to do it, or when he beautifies a spot and makes it attractive as a place for dwellers, or when he builds a trolley line or any other means of access to his land. He may then be said to have created the location value of his land. In such cases all that we have said regarding fertility value will apply also to location value.

In most cases, however, the location value is not the creation of the individual owner but of the general public, since it is the general public, rather than the individual owner, that builds schools, libraries, and streets, maintains police systems, and brings various utilities within reach. A few notorious cases have been cited of men who have bought land favorably situated and have done nothing to improve it, having even resisted taxation and all improvements. Yet in spite of such inertia they have found themselves rich as the result of the rise in the location value of the land.

A few such conspicuous cases furnish effective arguments in favor of the single tax—at least they excite resentment.

A land tax not necessarily a single tax. The arguments for a single tax are not the same as for a mere increase of the land tax. One may favor the increase of taxation upon the location value of land without being in any sense of the word a *single* taxer. He may believe in many different taxes, such as the inheritance tax, licenses, the income tax, etc. It would be absurd to call such a man a single taxer, even though he favored a special tax on the location value of land. Again, even though one were in the strict sense of the word a single taxer, one might advocate it on purely financial grounds, rather than on the grounds of social reform; that is, one might believe that all public revenues should be raised from the taxation of location values of land merely because he believed that this would be an easy way of raising revenue, and not because it would go very far toward the curing of poverty.

The financial arguments in favor of the land tax are fairly simple. Land cannot be hidden in the way that much personal property is. There may be some difficulty in appraising its value for purposes of taxation, but the difficulty is not greater than that of appraising for purposes of taxation the value of personal property, buildings, or anything else which is taxable.

Again, a tax on location values could hardly be said to have a repressive effect at all. If the tax on the products of industries tends to discourage production, this cannot be said to be true of land. Since location values are not produced by the payer of the tax, there is no production to discourage. You may tax land and still have it in undiminished quantities. As a cold-blooded financial proposition this has some merit. Even though one may take away from the landowner all its location value, the land itself still exists in undiminished quantities.

Arguments for the single tax. The argument for the single tax as an engine of social reform rests on three general propositions. In the first place, the single taxers maintain, since those who receive rent because of the location of their land create

nothing in return for the rent they receive, their incomes are merely subtracted from those of the rest of society. If their incomes should be taken away, this would not in any degree diminish the total productiveness of the community. By a mere process of arithmetic it is easy to show that if the incomes which they now receive were divided among the rest of the people, these other people would have larger incomes.

Is land kept out of use for speculation? In the second place, it is alleged that a great deal of land is kept out of use for speculative purposes and that a high tax on land values would force this land into use. The validity of this argument is doubtful. The illustrations given are usually those of tracts of land found lying idle in cities and suburbs. The owners are holding them apparently in the hope of getting a higher price in the future. It is easy to jump to the conclusion that if there were no prospect of gain by doing so, the owners would at once find a use for the land or sell it to others who could use it; but this does not take into consideration the fact that there may be no immediate use to which the owner could profitably put the land.

The only common cases in which the land is actually kept out of use because of speculation are where garden land is purchased and divided into building lots in advance of the demand for them. After the division has been made the land is no longer suitable for farm land or garden tracts because it is broken up into parcels too small to be cultivated economically. Meanwhile the public may be slow in buying the lots for building. The result is that for a number of years this land practically goes to waste.

A heavy tax on land would exempt other forms of property. A third argument for the single tax is to the effect that when a large amount of revenue is raised from a tax on land, there is no necessity for so high a tax, probably no necessity for any tax whatever, on other things. This reduction of taxation on other forms of property would serve as a stimulus to greater production. When, for instance, a farmer finds that his cattle, his crops, and his buildings are not taxed, or not taxed so

heavily, he is encouraged to develop these forms of property. If, as stated above, the taxation of location values of land enables the public to raise enough revenue from this source, and thereby to eliminate the taxes on all other things, this will tend to stimulate business and production in general. This argument is based on the repressive character of other forms of taxation than the land tax.

Putting idle talent to work. A fourth argument, not usually brought forward by single taxers, may be added to this list. In so far as certain owners of valuable land are enabled to live on the rent which comes to them because of its location value, and to remain idle instead of doing productive work, the community loses the productive power of these men. This is more important than all the land kept out of use for speculative purposes. If such persons were deprived of their incomes and thereby forced to do productive work, the community would gain by this addition to its list of productive workers. This would make for national prosperity.

EXERCISES

1. What is meant by the single tax?
2. Who were the original advocates of the single tax?
3. On what ground did they advocate it?
4. Has it generally been recognized that rent is a peculiar income?
5. By whom was the single tax made an engine of social reform?
6. What is the distinction between location value and fertility value in land?
7. Do all single taxers wish to tax both forms of value?
8. Are there any reasons for distinguishing between these two parts of the value of land?
9. What are the leading arguments for the single tax?
10. Is land commonly held out of use for speculative purposes?
11. Are men ever enabled to live without work because they are able to live on the rent of land?

CHAPTER XLVI

ANARCHISM

Anarchism and socialism. In some respects anarchism is the diametric opposite of socialism; in other respects it is somewhat similar to socialism. They represent opposite tendencies in that the socialist proposes to enlarge the power and function either of the state or of some kind of public organization, whereas the anarchist proposes to eliminate all authority, or all control of one person by another. Such organization as shall exist under anarchism shall be purely voluntary. Voluntary groups may be formed as large or as small as the individual members care to have them. The relations of one group to another shall likewise be on a purely voluntary basis. There shall be no state with a military arm or with police power of any kind.

Anarchism and socialism resemble each other in that both profess to revolt, either in part or in whole, against any system which gives one man power or authority over another. Many of the advocates of socialism object to private capital primarily on the ground that it gives one man, namely the capitalist employer, power and authority over another man, the propertyless laborer. The anarchist says, regarding this opinion: It is good so far as it goes. We anarchists are likewise opposed to giving one man power or authority over another. The private ownership of capital does what the socialist says it does, and that is wrong. We are therefore opposed to the private ownership of capital. But capital is not the only source of authority. The government likewise gives one man power or authority over another; the capitalist employer does not in fact have as much power or authority as a judge or a policeman, a governor or a president. The socialist, therefore, is only a halfway anarchist. He is opposed to one source of power and authority; we are

opposed to both sources. On this point the anarchist is undoubtedly more logical than the socialist.

May government eventually become unnecessary? The underlying philosophy of anarchism is of various kinds. There is one system of thought which is frequently but improperly called anarchistic. It is held by certain people that government and compulsion are made necessary by the imperfections in human nature,—that if we were so highly developed morally that each individual would voluntarily do what he ought to do or what was in the public interest, then it would not be necessary to use authority or compulsion on anybody; but since there are individuals with undeveloped moral natures,—individuals who do not voluntarily and automatically respond to the needs of society,—it is therefore necessary that they be compelled to do what they ought to do, or (which is the same thing) what they would do if they were fully developed.

Whether this delectable state is to be reached by the slow and somewhat cruel process of evolution or by the process of moral reform and religious evangelism may be open to speculation. There are probably not many people who would disagree with the general conclusion that government would be unnecessary in either case. If (but this is a large *if*) human nature could be so perfected, either by the slow elimination of the unsocial and the antisocial (that is, the criminal and the immoral) or by their moral regeneration, it might very easily follow that government would ultimately become unnecessary or at least that compulsion by governmental authority would become a thing of the past. This position, however, can hardly be called anarchistic in any real sense, for the real anarchist believes, not that government may ultimately become unnecessary but that it is now unnecessary.

Impatience of restraint. There is another type of thought, sometimes characterized as anarchistic, which does not revolt so much against government and the use of compulsion in the form of police power as against what is called moral compulsion; that is, the setting up by society, or by people in authority, of standards which others are bound to follow. It is proposed,

therefore, that we throw off the so-called shackles of conventionality and even of morality and that everyone do that which is right in his own eyes, regardless of what may be said by other people or by institutions and organizations which pretend to tell us what we ought to do.

Is morality an invention of weaklings to curb the strong? Among the people who take this point of view, however, two diametrically opposite conclusions are reached. There is one school represented by such writers as Kaspar Schmidt and Friedrich Nietzsche, who hold that religion and morality are the inventions of the weaklings of the world for the purpose of holding the strong in check. There is an old fable regarding the mice who found themselves oppressed by the cat. They voted unanimously that the cat should wear a bell in order that the mice might be protected. According to these writers religion and morality are merely different ways by which mice try to put the bell on the cat. They try to make it unpopular for the strong man to use his strength. They persuade him that it is immoral or irreligious, or that the vengeance of supernatural agencies will be let loose upon him if he exercises his strength to the detriment of the masses. Therefore the strong man, sometimes called the superman, should break loose from these conventionalities, should snap the cords with which the Lilliputians have bound him, and should dare to be great and independent and impose his will on the masses if he is able to do so.

Is morality an invention of those in power to curb the masses? The other school of anarchists, and certain socialists who are anarchistic in spirit if not in program, assert that religion and morality are the cunning inventions of priests and soldiers and capitalists to hold the masses in check; that for the average man to be good is merely to be good for somebody else—that is, for those in power; that to be good is to support the priest or the capitalist or the policeman or the judge or someone in authority; that to be free is to be good to oneself.

As to which of these two conclusions is the more absurd, it would be difficult to decide. They are mentioned to show to

what extremes of aberration the human mind is capable of going. One doctrine would lead the strong man to do as he pleased, to impose his will upon his neighbors either by the weight of his fist or by his superior power of destruction in some other form; the other conclusion would lead the masses of the people to sink into a state of license and violence which would destroy civilization and land us in a sort of primeval social chaos.

Are all human interests harmonious? There is, however, another system of thought which is truly anarchistic and less repulsive than either of these. This system is based on the fundamental assumption that all human interests are harmonious. In this best of all possible worlds, it is claimed, there can be no such thing as a conflict of human interests; it is in some way a reflection upon the Creator of the world to say that there could be anything but a harmony of real interests among men; it cannot possibly be true that one man's meat is another man's poison; these apparent conflicts are the creation of men and human institutions and are not inherent in the nature of man and the universe.

This underlying assumption sounds attractive, and doubtless many of us would like to believe it if we could. There are, however, so many hard facts in the way that not many of us are able to bring ourselves to the point of ignoring the very present and prevalent conflict of interests. It was shown in the chapter on Scarcity that the mere fact of a congestion of population—of too many people trying to live in one spot—creates in that spot a state of scarcity. Food enough in that particular spot cannot be produced for as many people as would like to live there. This situation in itself inevitably and necessarily produces a conflict of interests. Either some people must move to another spot or food must be brought from other spots to feed the people who are there. Either alternative will prove disagreeable to somebody. If neither of these alternatives is chosen, then there must be hunger; more than one person will be wanting each parcel of food, and that in itself is a conflict of interests. Here are certain facts of a physical nature which

cannot by any effort of the will or the imagination be conjured out of existence. There is, in fact, a conflict of interests wherever two people want the same thing.

Conflict of interests makes control necessary. Wherever there is a conflict of interests, one of two things is absolutely necessary: either the individuals must have a high moral development, which will lead each one to surrender certain interests in favor of others, or there must be an umpire to decide between them and enforce his decision. This umpire, by whatever name he may be called, exercises the function of government, and, in fact, this umpire is the government.

Emotional anarchism. There is another type of anarchism which can scarcely be said to have any underlying philosophy. It is based wholly on feeling and sentiment. Doubtless every human being possesses some repugnance toward being ruled, or being compelled to do that which he dislikes to do, or to leave undone that which he would like to do. A preference for one's own way shows itself rather early in the lives of children. Doubtless all of us feel bitter at times regarding some act of a governing agency or authority. Generally, however, we are able to keep these feelings under sufficient control to enable us to obey law and support the government. In other words, we generally see the necessity of government, however disagreeable it is at times to be forced to submit. Occasionally, however, an individual will react in the other way; that is, his repugnance will overcome his judgment. He has no particular philosophy, though he can always invent a reason or an excuse. A policeman, a court, or a flag, or any other evidence of symbol of government is as a red flag in his face; it causes anger, resentment, and insurgency, and nothing else. Such people are sometimes very adorable in other respects. So long as their feelings are properly soothed they may be exceedingly affectionate and loving. Those who know them personally find it difficult to reconcile their general personal qualities with their feeling against government. Nevertheless, from any broad and philosophical point of view they are among the most dangerous members of society. They

are the unadapted in a very important social sense. Mentally and morally they are as unfit for living under a settled, orderly government as a fish is physically unfit for living out of water. The process of evolution which, according to some writers, would eventually produce the delectable state of society in which all would think and feel alike is steadily weeding such people out. They insist on bumping their heads against the walls of the universe and destroying themselves along with the criminals and others who are unadapted to a settled civil life.

There is still another type of anarchist who is merely mean and bent on making trouble. He can always be relied upon to be on the wrong side of every question. Wherever decent, self-respecting men and women are in general agreement on any subject, he will always be found opposing them. It is true, he does not always go in for anarchism. He is found in every movement which gives him a chance to vent his general hate and spitefulness. Wherever there is a chance to denounce government, religion, law, order, morality, chastity, sobriety, or anything else that is of good repute, his voice is always heard. He generally tries to get into good company by calling himself a radical, an iconoclast, or a revolutionist, knowing that excellent men and women have been called by all of these names.

Is patriotism a vice? There are various other views, some of them of an idealistic nature, which savor of anarchism and lead to absurd conclusions on practical subjects. One of these is that patriotism is a vice. This strange doctrine is advanced on grounds of the broadest humanitarianism. We should love all men equally, it is urged, without regard to race, color, creed, or nationality. The patriot cares more for his fellow citizens than for the citizens of other countries; therefore, according to this type of anarchism, he is narrow in his views. Moreover, if he thinks more of his fellow citizens than of others, this will lead him, in case of war, to try to kill the citizens of the enemy country. Killing, it is argued, is murder. The fact that it is done as an act of war does not in the slightest degree change its character.

When a great world state exists, then, of course, it will be proper to be patriotic toward it. We may even work consistently for it. But to condemn all patriotism for lesser states would, if this condemnation were effective, merely destroy existing states and all law and order, and land the world in chaos. Family sentiment is narrow in the same sense that national sentiment is narrow. The man who loves his wife must care more for her than for other women. This and all other forms of family sentiment may, in a sense, make us narrow, but it does not follow that it is bad to be narrow. Again, if we are to avoid narrowness, why be humanitarians? Are not many animals also companionable and lovable? To show a preference for men is to be narrow in the sense in which these people use that word.

EXERCISES

1. What is anarchism?
2. How does it differ from socialism?
3. Is one an anarchist merely because he believes that government may eventually become unnecessary?
4. Is a believer in the millennium an anarchist?
5. What type of anarchist holds to the belief that morality is an invention of weaklings to curb the strong?
6. What type believes that morality is an invention of those in power to curb the masses?
7. Are all human interests harmonious?
8. If not, is there need of an umpire?
9. What is meant by emotional anarchism?
10. Does the anarchist hold that patriotism is a vice or a virtue?

CHAPTER XLVII

CONSTRUCTIVE LIBERALISM

What the liberalist believes. A liberalist in economics is one who believes in the freedom of the individual rather than in compulsion. He believes that individuals will, without compulsion and by voluntary agreement, do most of the things that are necessary to provide for the needs of the community. He believes that it is not necessary continually to impose upon the individual the authority either of a benevolent despot or of a well-meaning majority. In such extreme cases as can be covered by the criminal law, laws for the prevention of violence and fraud, for the enforcement of contracts, and laws for the standardization of various aspects of business, compulsion is necessary and helpful. He believes that the interests of the public are expressed quite as accurately on the market and through the price lists as through the ballot box and the statute books. He even believes that poverty and most of the social ills can be eliminated under the system of voluntary agreement—freedom to accumulate, to own, and to operate private property—and without subjecting individuals to the necessity of becoming government employees.

Freedom versus compulsion. There are only two ways of getting men to do what is necessary for the prosperity of the nation: one is to induce them by the offer of a reward either of a material or of an immaterial kind; the other is to compel them by authority. For example, an army can be recruited and men led to fight for their country either by the volunteer system or by conscription. The industrial army may likewise be recruited by either method. The one is the method of freedom; the other is the method of compulsion. Men may be induced to work on the farms and in the factories and mines by the offer of wages, profits, etc., or they may be directed by authority to do so.

If no one were allowed to accumulate capital or to own a farm, a factory, or any kind of business property, we should have much less freedom to choose our own occupations and to direct ourselves than we have under a system of free private enterprise and voluntary agreement. Under a régime of complete government ownership and operation men would have to be chosen by authority for the higher as well as for the lower positions in the industrial system.

Opposed to socialism. That there would be less freedom under universal government ownership than under private ownership will be clear to anyone who understands that under the former no one could even begin farming on his own initiative, but would have to be placed in charge of a farm or told to work under a boss, according as those in authority should decide. Under a liberal system anyone who can handle a farm successfully can become a farm manager and ultimately a farm owner, as thousands have already done. The same may be said of other industries.

The liberalist believes that, in general, the volunteer plan is better than the compulsory one. There are, of course, occasions when compulsion becomes necessary, but these are usually occasions of acute and instant necessity, when there is not time for the market to adjust itself and to organize a volunteer system.

In time of war compulsion takes the place of freedom. Socialists are in the habit of saying that in time of war nations turn to socialism. It is true that in time of war compulsion is generally, or at least to a considerable degree, substituted for freedom; but the whole business of war is compulsion. Our dealing with foreign enemies is necessarily on a compulsory rather than on a voluntary and contractual basis, and the whole organization of society may have to be changed from freedom to compulsion in order to carry on the compulsory business of war.

There are a multitude of minor forms of compulsion besides war itself. Taxation is a compulsory payment of money to the government. Conscription is compulsory military service. Forced loans are compulsory in a high degree. The censorship of the press is merely compulsory regulation of the business of selling

talk for private profit. It may be necessary, in order to prosecute a war successfully, to resort to compulsion in recruiting munition factories and even farms. Rationing the population in time of food scarcity may be necessary.

Compulsion cannot create equality. In a régime of universal compulsion some must necessarily be treated better than others. Even though conscription be carried out without personal favor, the result works to the disadvantage of those drawn by conscription as compared with those not drawn. Those on whom the lot falls act as shock-absorbers for the rest of the community. There is nothing particularly democratic about this, though it may be the best possible way of meeting a national crisis. Under such conditions, when the life of a nation is at stake, it does not stop for the niceties of social justice. Necessity knows no law. It is probable, however, that as a result of several years of this compulsion there would be so much dissatisfaction and sense of unfairness as to provoke a strong reaction against compulsion and in favor of the volunteer system, not only in the work of fighting but in business and industrial pursuits as well. We might consider ourselves fortunate if this reaction did not carry us too far in the direction of license and impatience with all restraint.

Dangers of freedom. Freedom of trade—freedom to buy and sell, to offer and accept rewards—is a part of the program of liberalism. There are, however, some very serious results which accompany freedom of bargaining. The advantage in bargaining is always on the side of those who are trying to sell something which is undersupplied or of those who are trying to buy something which is oversupplied. When there is a long-continued oversupply of certain commodities or of certain kinds of labor, those who are under the disadvantage of trying to sell them feel, naturally enough, that they are playing a losing game. They are frequently willing to take their chances under some form of compulsion, feeling that they could not be much worse off than they are under the system of free contract.

The situation of those trying to sell something that is oversupplied, especially if it happens to be labor, is summarized in the

statement that "liberty is frequently the liberty to starve." It must be confessed that liberty is dangerous, even though it is very precious. Severe conditions are imposed on free men. Liberty to be on the street may mean liberty to get run over by an automobile. Liberty to go swimming may mean liberty to drown. Liberty to sail the seas may mean liberty to get shipwrecked. Children who are restrained in their liberty and are forbidden to be on the street are in less danger of being run over, and those who are prevented from going in swimming are in less danger of being drowned. Liberty is a terrible thing, but at the same time it is, for grown men, beyond price. Liberty to buy and sell may mean liberty to become bankrupt. The individual who has a guardian to forbid him to do any bargaining whatsoever may be safe from bankruptcy.

In ordinary times, for some hundreds of years back, the unskilled laborer has been at a disadvantage. A great many sympathetic people have assumed that there was something inherent in the nature of labor that put the laborer at a disadvantage, and something inherent in the nature of capital that put the capitalist at an advantage in the bargaining process. This is not true, although, as we have seen above, conditions have generally been more favorable for the capitalist than for the unskilled laborer. But whenever and wherever unskilled labor has been hard to find, the advantage has been quite as much on the side of the unskilled laborer, and the disadvantage quite as much on the side of the employer.

Whenever it has been possible for an employer to hang out his shingle saying "Men Wanted" and have ten men apply for each position, the conditions have been favorable for the employer and unfavorable for the laborer. The fact that there are more men applying for jobs than there are jobs to be had is a sure indication of an oversupply of labor. The case is parallel to that which would exist if a buyer of wheat could hang out a sign "Wheat Wanted" and have many times more wheat offered than he could buy. That would be a sure indication of the oversupply of wheat. On the other hand, if a farmer should put up a sign which read

"Wheat for Sale" and find that many more buyers than he could supply were coming to purchase wheat, that fact would indicate an undersupply of wheat. Similarly, if a laborer, by putting out a sign "Job Wanted" should have several employers coming after him, this fact would indicate an undersupply of labor.

Making the advantages even on both sides. The policy of the constructive liberalist is indicated by these observations. It is his opinion that conditions can be created under which the average employer will find it as hard to get a man to work for him at liberal wages as the man will find it to get an employer to hire him at those wages. When that is accomplished the advantages in bargaining will be about even. Labor would no longer be under a handicap in the bargaining process. Laborers will no longer feel the need of some compulsory restriction upon bargaining, but will feel quite able to take care of themselves without help from the government or any other compulsory agency.

A program looking in this direction may take a little longer to work out, but from the point of view of the constructive liberalist the results, once achieved, are vastly preferable to any achieved under a compulsory system. There is an old story about a wagoner, one of whose wheels got into a deep rut. Instead of trying to extricate it, he sat down by the side of the road and called upon Hercules to aid him. The story goes that Hercules replied that if the man would put his shoulder to the wheel, he could get out of the difficulty without calling on outside help. This, according to the liberalist, represents a general tendency in human nature. The government is our Hercules, and whenever we get into difficulties we are in the habit of sitting down and crying vociferously for the government to come and do something.

"Doing something" for people. Beneficence, is, of course, a characteristic of good government; but many of us, according to the liberalist, have never reached the point where we can understand that a "beneficent letting alone" is sometimes the most beneficent thing the government can give us. There are many people who feel that when they are ill the doctor must "do something." They do not realize that sometimes the most beneficent

thing the doctor can do is to do nothing. A doctor whose desire is to please his patients may feel under some compulsion to do something for them, even if it is nothing more than to give them bread pills. From the standpoint of the liberalist much of our so-called social legislation consists of bread pills.

Sometimes, however, it is really necessary that the doctor should do something. The doctor whose skill consists in his ability to cure sickness rather than to please patients will have enough to do, provided the people know enough to appreciate him. The same may be said of a government. There are a few really vital things that a government may do. If it succeeds in doing these few things well, it will then be unnecessary to do the thousand and one trivial things that it is asked to do.

So far as this country is concerned, probably the most far-reaching and constructive piece of legislation in the last generation has been the restriction of immigration. This is one of the few acts of the government which go directly to the root of the difficulty of low wages and poverty. It is an act which definitely aims at preventing an oversupply of unskilled labor such as formerly existed. It is true that it does not go far in this direction, but at least it indicates to the public that the government has recognized the source of the difficulty and is no longer proceeding on general guesswork in an attempt to overcome it. If it will go a little farther in the same direction, it will make unskilled labor permanently so scarce and hard to find that the unskilled laborer will no longer be at a disadvantage, but can bargain on even terms with employers and secure high wages for himself without help from anybody.

A low standard of living and a high birth rate. But immigration from Europe and Asia is not the only source of oversupply of unskilled labor. The high birth rate among the ignorant and unskilled is another large source of cheap labor. Nothing, apparently, but a rise in the standard of living will reduce the volume of this stream. A rise in the standard of living means an increase in the number of things which the average man or woman thinks necessary to the support of the family. The more things

they feel they must have before they can marry and support a family, the longer they will postpone marriage. The longer they put off marrying, the smaller number of children there will be in the family, partly, at least, because the child-bearing period of the wife is reduced. If the age of marriage is raised on the average from eighteen to twenty-three, there are five less years during which the wife may bear children.

Families too small among the educated classes. The restriction of immigration among the ignorant and unskilled, of course, has nothing to do with the restriction of immigration among the educated and skilled. The latter are as free to come as when immigration was unrestricted. Similarly, a rise in the standard of living among the ignorant and unskilled has nothing to do with the marriage and the birth rate among the educated and skilled. Among the latter classes the reform ought to proceed in quite the opposite direction. There is no doubt that among these people marriages are postponed too long, and the average families are too small.

Increasing the supply of employers. The decrease in the number of people born with the heredity and prospective training which fit them for skilled positions and for positions in the ranks of the employing class tends to reduce the demand for unskilled labor. Hitherto unskilled laborers have suffered from two causes: the fact that there have been too many unskilled laborers, and the fact that there have been too few employers. It is as though, in the badly balanced ration of an individual or an animal, the too abundant ingredient, say starch, were to be increased more and more, and the too scarce ingredient, say protein, were to be decreased more and more. The combined result of increasing the one and decreasing the other would produce a more and more unbalanced ration, to the detriment of the man or the animal that was being fed. The continuous increases in the ranks of the unskilled laborer through immigration, together with the high birth rate, and the decrease in the highly skilled and managerial labor through the postponement of marriage and various other causes, have tended in the past to produce a progressively unbalanced

population, tending to make unskilled labor cheap and to make highly skilled and managerial talent dear.

Fortunately the effect of this combination of processes has been offset, at least partially, by our system of popular education. Such a system of universal and popular education has the effect of redistributing talent, of taking young people who would otherwise have remained in the ranks of the unskilled, and training them for the ranks of the skilled, the managing and the enterprising class. This tends to reduce the supply of ignorant laborers and increase the supply of educated workers. If the system of popular education continues to improve, and greater and greater restrictions are placed upon the importation of unskilled labor, and a higher standard of living is acquired by our own unskilled laborers, the combined results of these three changes will tend to make unskilled labor scarce and hard to find, to make jobs abundant and easy to find, and, for both reasons, to give the unskilled laborer the advantage not only of retaining his liberty of contract but also of prospering under it. If we carry out our educational policy to its logical limit and train not only skilled laborers but also managers and employers, and at the same time create a more rational standard of living and better moral conditions among these classes, the combined results of these two policies—that is, training men for the high positions and encouraging larger families among them—will so increase the numbers of the managerial class as to take away its present advantage in the bargaining process. By following this general process throughout all ranks of society we may expect in a short time so to balance the advantages of bargaining as to give us something approximating equality without substituting compulsion for freedom.

Thrift and the laborer. The encouragement of thrift will tend in the same direction and will accelerate the process of putting unskilled labor in a position to prosper under freedom. It is through thrift that capital accumulates. When capital becomes so abundant that the average owner of capital has great difficulty in finding an opportunity to use it, he will have to be content with a smaller share in the products of industry.

The encouragement of productive enterprise, the frank acknowledgment of our obligation to the man who shows the ability to plan a new enterprise and, what is vastly more important, to make it actually succeed, will do a great deal to expand the opportunities for those of us who do not possess that kind of ability. The more such men we can develop among us, the more our industries will expand and the more opportunities for remunerative employment there will be for the rest of us.

Poverty easily curable under freedom. We need not have poverty among us a generation longer than we want it. By setting to work deliberately to balance our population, causing ignorance and lack of skill to disappear and causing technical training and constructive talent to increase, we can, in a short space of time, make low wages and poverty a thing of the past. What is even better, we can do this and still leave everyone a free man. This is the gospel of the new, or constructive, liberalism which is destined to bring relief—if not to this nation, at least to some nation which has the wisdom to adopt it—and which, when adopted, will keep that nation in the position of leadership among all the nations of the earth.

A LIBERALIST'S PROGRAM FOR THE COMPLETE ABOLITION OF POVERTY[1]

I. Legislative Program

A. For the redistribution of unearned wealth
1. By increased taxation of land values
2. By a graduated inheritance tax
3. By control of monopoly prices

B. For the redistribution of human talent
1. By increasing the supply of the higher, or scarcer, forms of talent
   (*a*) By vocational education, especially for the training of business men
   (*b*) By cutting off incomes which support capable men in idleness

[1] Compare the author's work entitled "Essays in Social Justice," chap. xiv. Harvard University Press, 1915.

2. By decreasing the supply of the lower, or more abundant, forms of labor power
   (*a*) By the restriction of immigration
   (*b*) By the restriction of marriage
      (1) By the elimination of defectives
      (2) By the requirement of a minimum standard income
   (*c*) By a minimum-wage law
   (*d*) By fixing building standards for dwellings

C. For the increase of material equipment
1. By increasing the available supply of land
2. By increasing the supply of capital
   (*a*) By encouraging thrift versus luxury
   (*b*) By building up savings institutions
   (*c*) By making investments safe

II. Nonlegislative Program

A. For raising the standard of living among the laboring classes
1. The educator as the rationalizer of standards
2. Thrift and the standard of living
3. Industrial coöperation as a means of business and social education

B. For creating sound public opinion and moral standards among the capable; for example,
1. The ambition of the family-builder
2. The idea that leisure is disgraceful
3. The idea that the productive life is the religious and moral life
4. The idea that wealth should be regarded as a means of production rather than a means of gratification
5. The idea that the possession of wealth confers no license for luxury or leisure
6. The idea that government is a means, not an end
7. Professional standards among business men

C. For discouraging vicious and demoralizing developments of public opinion; for example,
1. The cult of incompetence and self-pity
2. The gospel of covetousness or the jealousy of success
3. The idea that the capitalization of verbosity is constructive business

EXERCISES

1. What is meant by a liberalist in economics?
2. How can men be induced to do things necessary for the good of the nation?
3. Can any system of compulsion secure equality?
4. What is meant when it is said that freedom is a dangerous thing?
5. Does the fact that it is dangerous mean that it is undesirable?
6. Is it possible to have equality and freedom at the same time?
7. How can we have both?
8. In what two ways does thrift benefit the laborer?
9. In what two ways does universal education benefit the laborer?
10. Outline a liberal program for the abolition of poverty.

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